

Microbiology Abstracts: Section A

Industrial & Applied Microbiology

PAMPHLET BOX

Volume 18 number 12
Annual Indexes to Volume 18 1983

QR

53

I5322

V. 18

1983

No. 12

NK

Sci

ISSN 0300-838X

U. T. C.

FEB 13 1984

LIBRARY

Cambridge Scientific Abstracts

An annual subscription to Microbiology Abstracts, Section A includes twelve monthly issues, each containing author and subject indexes and the twelfth issue comprising the annual cumulation of both indexes. Subscriptions are entered on a calendar year basis only.

Full details of surface and air delivery rates in the various geographical areas shown below can be obtained from the appropriate office or agent.

Japan

US Asiatic Company Limited,
Tsutsumi Building,
13-12 Shimbashi 1-chome,
Minato-ku, Tokyo 105, Japan.

India, Sri Lanka, Bangladesh, Nepal, Burma, Malaysia, Singapore, Indonesia and Thailand

Universal Subscription Agency Pvt. Ltd.,
117/H-1/294-B Model Town,
Pandu Nagar, Kanpur 208005,
India.

Israel

N.P.K. Meida Ltd.,
PO Box 10127,
Tel-Aviv 61101,
Israel.

Rest of the world

Cambridge Scientific Abstracts,
5161 River Road,
Bethesda, MD 20816, USA

© 1983 Cambridge Scientific Abstracts
All rights reserved by the publisher. No part of this publication may be reproduced or transmitted in any form by any means electronic or mechanical, including photocopying, recording or any information storage and retrieval system, without permission in writing from the publisher.

Microbiology Abstracts, Section A (ISSN 0300-838X) is published monthly for US \$390.00 per year by Cambridge Scientific Abstracts, 5161 River Road, Bethesda, MD 20816. Second class postage paid at Bethesda, MD. POSTMASTER: Send address changes to Cambridge Scientific Abstracts, 5161 River Road, Bethesda, MD 20816.

Microbiology Abstracts: Section A

Industrial & Applied Microbiology

Volume 18 number 12
Annual Indexes to Volume 18 1983

Editorial staff

Barbara B. Engel
Ray Fisher
Lawrence L. Pilon
J. Nicholas Ruth III
Darrell D. Stover

ISSN 0300-838X



Foreword

Microbiology Abstracts, Section A commenced publication in 1965 and is published monthly. Each issue contains approximately 900 abstracts followed by author, patentee and assignee, and subject indexes.

Coverage

In compiling each month's issue, CSA's editorial staff monitors approximately 5,000 primary journals as well as patents and other source references for papers falling within the scope of Microbiology Abstracts, Section A.

Subject scope and arrangement of subject matter

The table of contents shows the full scope of the journal.

Abstracts are allocated to the section (subsection) to which they are most relevant and cross-referred to other sections (subsections) where appropriate.

Using this journal

Full details of the bibliographic data cited for each abstract and of abbreviations used can be found in the first issue of this volume.

- [illegible]

Author Index

- Andzhaparidze, A.G. 3533
Aneja, K.R. 4512
Anestad, G. 9832
Ang, K.S. 8747
Angelini, P. 3405, 6035, 8731.
Angelov, T.I. 5554
Angerelli, A. 8890, 9718.
Angle, J.S. 576.
Angluster, J. 7869.
Angulo, G.P. 3421.
Angray, J. 9788.
Anhalt, J.P. 834, 6156.
Anifantakis, E.M. 4871.
Anikumar, M.B. 4268, 6870.
Anisimov, T.M. 2494.
Anisimova, L.A. 5159, 6031, 7037.
Anjaneyulu, A. 360, 1156, 4951, 8613.
Anjos, J.R.N. 4930.
Anke, T. 6083, 8042.
Anniksraya, A.S. 8830.
Annapurna, Y. 4254, 5932, 6084.
Anir, J. 749, 5439.
Anness, B.J. 8405.
Anpilogova, L.K. 1344.
Ansari, A. 853.
Ansari, H. 2812, 6525.
Ansari, P. 1177, 3627.
Ansonova, L.A. 1544.
Anslow, P.A. 8468.
Anson, A.E. 1291.
Anstead, G.M. 2801.
Antai, S.P. 170, 2896.
Antai, T. 7583.
Anthony Raj, S. 7588.
Anthony, C. 906.
Antichuk, A.F. 2377.
Antipenko, V.P. 1537.
Antipov, A.V. 1557.
Antoni, M. 7130.
Antoine, A.D. 2367.
Antoni, F. 8238, 8264.
Antoni, G. 8514.
Antonini, E. 5181.
Antonini, G. 5181, 8014.
Antonishin, B.V. 2495.
Antonow, J.F. 4095.
Antonov, A.S. 2494.
Antonov, V.F. 578.
Antonova, I.M. 8943.
Antonova, S.V. 7025.
Antonov, G. 862.
Anwar, H. 4480.
Aoki, A. 6217.
Aoki, H. 921, 2582, 7451.
Aoki, K. 3786, 5428, 7317, 8301.
Aota, T. 4332.
Aoyagi, H. 5264, 9786.
Aoyagi, T. 2809, 8389.
Aoyagi, Y. 914.
Aoyama, T. 898.
Aoyama, Y. 9187, 9488.
Aoyama, Y. 7806.
Aoyama-Tojo, P. 4234.
Apel, W.A. 8713.
Apelbaum, A. 7593.
Apicella, M.A. 9826.
Apiraktvongse, P. 5565.
Aplin, R.T. 7149.
Appaji Gowda, B. 3940.
Appelbaum, P.C. 838, 9899.
Appiano, A. 4034.
Apple, A.E. 8622.
Appelbaum, R.S. 282, 283, 285.
Aple, R. 3194, 3195, 7800.
Aradi, J. 78.
Aragaki, M. 1218, 1423, 4996.
Arai, H. 7450.
Arai, K. 7456, 9223.
Arai, M. 3435, 3698, 3699.
Arai, M. 6387, 6515, 6523, 9766, 9789, 9790.
Arai, T. 2830, 3445, 9679, 9777.
Arai, Y. 3428.
Arai, G.F. 9954.
Arakelyan, I.S. 1787, 6174.
Araki, K. 2731, 2732.
Araki, Y. 3275, 3305, 5532, 8327.
Arambel, M.J. 6680.
Aranguren, J. 3218, 3219.
Aratani, M. 919.
Araujo, J.B.M. 2291.
Araujo, J.D. de 6098.
Arbuthnot, J.P. 6723.
Arcamone, F. 1611.
Archambault, L. 1464.
Archard, D.B. 387, 1226, 3046, 3968, 7196.
Archer, F.C. 314.
Archer, G.L. 7042.
Archer, S.A. 5041.
Archibisacci, C. 9991.
Arciero, D.M. 1849.
Arcuti, E.J. 6635.
Ardeleanu, J. 7130.
Ardito, R.V. 6098.
Aren, A.K. 7341.
Arenas, A. 1573, 7098, 9693.
Arenas, J.B. 2640, 4459.
Arens, A.K. 4579.
Argese, E. 6470.
Argyle, P.J. 4796.
Arias, J.A. 9344, 9345.
Arias, J.M. 9667.
Arigoni, D. 7629.
Arima, H. 4359.
Arinbasarova, A.Yu. 3688, 7433.
Arioli, V. 7183.
Arisawa, M. 2538, 2754, 3397, 3405, 5248, 6501, 8731.
Arko, R.J. 9925.
Arko, R.J. 9925.
Armanios, R.R. 5896, 5897, 6348.
Armesheva, A. 7068.
Armon, R. 3538.
Armstrong, C.H. 8722.
Armstrong, J.A. 7106.
Armstrong, J.L. 1533.
Armstrong, J.T. 2308.
Arnau, A. 4744, 5513.
Arnold, J. 6204.
Arnold, V. 8850, 9753.
Arnott, G. 5214.
Arnold, E.C. 4681.
Arnold, K. 8807.
Arnold, M. 9816.
Arnold, M.K. 795.
Arnold, R.R. 7247.
Arny, D.C. 4964, 6642, 8643, 9456.
Aron, G.M. 1576, 3368.
Arons, R.M. 726.
Aranson, D.A. 9767.
Arora, B. 1153.
Arp, D.J. 3887.
Arrigo Reina, R. 2474.
Arsenakis, M. 7227.
Arshad, M.A. 5906, 8669.
Arsuffi, T.L. 8045.
Artemova, A.A. 3688.
Arthur, R.R. 838.
Artico, M. 7082.
Artis, W.M. 8792.
Arutunian, A.A. 3784.
Arutunian, A.A. 7967.
Arutunian, E.G. 47.
Arya, S. 3165.
Arzone, A. 9398.
Asabe, Y. 287.
Asada, K. 4588.
Asada, M. 1944.
Asai, M. 4402.
Asai, T. 8626.
Asaka, S. 5971.
Asakawa, N. 2333.
Asami, Y. 9815.
Asano, K. 567.
Asano, Y. 1895, 1896, 1982.
Asanok, K. 8259.
Asaoka, T. 2830.
Asadbrali, G. 4333.
Asensio, C. 6235.
Ashby, J.W. 1146, 9435.
Ashdown, N. 6019.
Asher, M.J.C. 3634, 4089.
Ashley, F.P. 3507.
Ashley, G.W. 69.
Ashley, M.A. 2534.
Ashman, K. 4567.
Ashton, F.E. 1780, 4701.
Ashton, W.T. 7112.
Ashworth, J. 2405, 4576.
Ashworth, L.J. 9390.
Ashy, M.A. 5470, 5992.
Asif, M. 293.
Asina, S. 4152.
Asiniani di San Marzano, C.-M. 2858.
Asjes, C.J. 6871.
Askeland, R.A. 6606.
Askelof, P. 886, 889.
Askiaev, L. 4716.
Askimham, M. 293.
Asmussen, G. 6826.
Assal, B.M. 9747.
Asscher, A.W. 4489.
Asselberghs, S. 5576.
Asses, S. 8782.
Astasina, L.N. 2548, 6102, 7071, 7970, 8724.
Astasina, A. 691.
Aster, M. 7545, 9251.
Aston, J.W. 9270, 9271, 9272.
Asvany, A.S. 533.
Aszalos, A.A. 2591.
Atabug, R.G. 1380.
Atherton, H.V. 4836.
Atherton, K.T. 5364.
Athow, K.L. 2252, 5674.
Atilano, R.A. 1256, 3090, 3993, 6882, 7665.
Atquillah, M. 9797.
Atiri, G.I. 5042.
Atkey, P.T. 433.
Atkin, J.D. 9462.
Atkins, C.A. 4247.
Atkins, T. 9875.
Atkinson, B. 678, 9722.
Atkinson, J.C. 225.
Atkinson, P. 1332, 1379.
Atkinson, T. 970, 8266.
Atlayvinyte, O. 4256.
Atmaran, K. 6659.
Atrai, P. 3706.
Atsumi, K. 5246.
Attaby, H.S.H. 8446.
Attar, L.E. 2619.
Attare, A.F. 4968.
Attia, R.M. 9143.
Attia, S.H. 5751.
Attia, S.H.A. 5758, 5760.
Attwill, P.M. 52.
Atwell, R.W. 6258.
Atwood, M.M. 32.
Atwater, J.A. 1575.
Atwell, S.M. 7506.
Aubart, C. 7816.
Aubert, J.P. 9577.
Auboeck, J. 7247.
Aude, J.D. 4964, 8642, 8643, 9456.
Auden, J.A.L. 6164.
Auerman, T.L. 1867.
Augustyniak, L. 8081.
Aujla, S.S. 7281, 5817, 6350.
Aulakh, M.S. 8680.
Auld, D.L. 478.
Aulio, C.C.G. 9049.
Aull, J.L. 2759.
Aumayr, A. 1846.
Aumuck, Z. 7519.
Aurich, P. 9346.
Aust, H.J. 6752, 8554.
Austin, D.E.G. 3542.
Austin, B. 5427, 8763, 8766, 8964.
Austin, F.J. 3516.
Atbador, F.M. 7848.
Aubadur, K. 3236.
Auzane, S.I. 1839.
Auzina, L.P. 1839.
Avakian, P. 7511, 7512.
Avakian, N.O. 7808.
Avanesov, A.A. 7826.
Avan, M.E. 2649.
Avandano, V. S. 208.
Avandano, M.C. 6318.
Averbukh, L.A. 7166.
Avercheva, N.L. 2588.
Averre, C.W. 5009, 9411.
Avery, K.V. 7667.
Avelis, A. 5789, 8588.
Averginos, G.C. 9235.
Avivi, Y. 5942.
Avrorov, V.P. 6713.
Avrutin, V.R. 8862.
Avsyuk, I.V. 4579.
Awasthi, L.P. 6072, 6082, 7771, 7960.
Awasthi, S. 4054.
Awata, M. 4415, 8886.
Awonake, K.O. 5939.
Ax, H. 6197.
Axelsson, P. 8076, 8993.
Axtell, R.C. 2834, 6060, 7461, 8162.
Ayache, R. 3468.
Ayabana, A. 651.
Ayay, Y. 3884.
Ayay, D.K.G. 407.
Ayaydin, F. 9438.
Ayer, W.A. 7463.
Ayers, A.R. 4602.
Ayers, J.E. 375, 382, 455.
Ayers, L.W. 737, 9943, 9953.
Ayers, W.A. 8356.
Ayres, D.E. 4995.
Aynehchi, Y. 2458.
Ayoub, J.C.A. 6098.
Ayres, M.D. 795.
Ayres, P.G. 3931, 3935.
Ayragan, A. 751.
Azmi, P.H. 732.
Azar, A.H. 4883.
Azari, M.R. 1927.
Azarova, T.S. 551.
Azcon, R. 4204.
Azavedo, J.L. 5151.
Azhar, A.F. 4734.
Azmi, P.H. 732.
Aziz, A.H. 639.
Aziz, K.M.S. 882.
Aziz, S. 9256.
Azizbeykan, R.R. 661.
Azuma, I. 7442, 8327, 8330.
Azuma, S. 1649.
Azumi, T. 5296.
Azzini, A. 9225.
Baard, S.W. 6837, 9485.
Bach, E. 515, 6898.
Baba, M. 5211.
Babaa, M.M. 6248.
Babacuah, K.D. 4977.
Babazarov, T.R. 2361.
Babbar, O.P. 7952.
Babchenko, I.V. 2260.
Babich, H. 1655.
Babiker, A.G.T. 1277.
Babini, A.R. 3040.
Babish, J.G. 3489.
Babiuk, L.A. 5218, 6079.
Babjee, A.M. 1687.
Babeve, I.P. 581.
Babu, M. 4000.
Baccay, R.A. 7199, 7200.
Bach, V.T. 6149.
Bachmann, M.R. 6689.
Bachofner, R. 4763.
Bachrach, U. 5170.
Bachvarova, R. 7223.
Bacino, D. 6199.
Backman, P.A. 1137.
Backstroem, V. 2878.
Bacon-Hill, P. 9594.
Bacon, C.W. 374.
Bacon, M. 2827.
Baczynski, L. 4419.
Badalian, E.N. 7826.
Badenoch-Jones, J. 1509.
Badenoch, P.R. 9676.
Badi, K. 1958.
Badi, M.F. 8755.
Badran, A. 200.
Bae, J.C. 6381.
Baek, L. 9308.
Baer, L. 9567.
Baer, M.O. 4699.
Bagbi, G. 9433.
Baghdadi, A.M. 7813.
Bagnyuk, V.M. 8062.
Bagyaraj, D.J. 2113, 2341, 2360, 4227, 6947, 6949, 9562.
Bahadur Mesh, M.D. 4004.
Bahadur, K. 3237, 3236.
Bahajaj, A.A. 7959.
Bahig, M.R.E. 5586.
Bai, H. 1037.
Bai, N.J. 3056, 6430.
Baiano, L. 3497.
Bain, M.E. 2649.
Baier, R. 743.
Bailey, D.M. 5222.
Bailey, J.A. 2992.
Bailey, J.E. 376, 3622, 3631.
Bailey, J.S. 253.
Bailey, K. 6619.
Bailey, R.B. 2866.
Bailey, T.B. 1316.
Baillies, K.W. 7704.
Ballargeon, M.W. 8398.
Ballbridge, A. 5727, 5921.
Baines, S. 2888.
Bains, N.J. 229.
Bains, S.S. 5688.
Baizagi, A.K. 7067.
Baird, J.K. 9200.
Baird, R.M. 1801.
Baird, E. 4887.
Baipai, A.M. 6495.
Baipai, S.K. 2497.
Bakardjeva, N. 7223.
Bakardzieva, N. 1240.
Bakardzieva, D.K.G. 407.
Baker, D. 439, 5623.
Baker, B.S. 5476.
Baker, C.J. 9498.
Baker, C.N. 9748.
Baker, D. 4239.
Baker, D.A. 6244.
Baker, H. 6209.
Baker, J.H. 2885.
Baker, J.O. 8255.
Baker, K.F. 9472.
Baker, K.H. 3800.
Baker, K.H. 5750.
Bakharashvili, M. 3369.
Bakhet, B.R. 7668.
Bakshi, A.K. 5708.
Bakshish, N.N. 8448.
Bakhtiar, M. 2544, 6182, 6305.
Bakr, T.M.F. 5375.
Bakke, J.E. 8385.
Bakken, G. 6272.
Bakker, A. 2202.
Bakker, C.M. 1065.
Bakker, M. 8812.
Bakulin, I.N. 2964.
Bakulina, N.A. 1596, 1599.
Bal, S. 9680.
Balaban, N.P. 8284.
Balakrishna, A.N. 2341.
Balakrishna, J. 3616, 9593.
Balakrishnam, R.A. 188, 1534, 1535, 2658, 5322.
Balasio, J.R. 172, 2022.
Balasubramanian, S. 3315.
Balasubramanyam, R.H. 7769.
Balatsouras, G. 7592.
Balatti, A.P. 7608.
Balayam, S. 310.
Balayan, M.S. 3521, 3533.
Balazs, D. 6239.
Bald, J.G. 1427, 9417.
Baldacci, E. 1283, 1287.
Baldani, J.J. 9602.
Baldani, J.J. 9602.
Baldassari, B. 9620.
Balder, H. 2250, 6388, 8609.
Baldigo, S.M. 8140.
Baldry, M.G.C. 7088.
Baldwin, B.C. 4117.
Baldwin, J.E. 7145, 7149.
Baldwin, T.O. 7390.
Balint, S. 6637.
Balis, C. 4746.
Ballwill, D.L. 5300.
Ballwill, F.R. 7109.
Ball, D. 1958.
Ball, P.R. 2371.
Ball, S.L. 6755, 6756.
Ball, S.T. 6994.
Ballabio, M. 4390.
Ballard, R.G. 3167.
Balle, J. 6734.
Balliano, J. 2493.
Ballongue, J. 4726.
Ballou, C.E. 65, 2756, 8220.
Balny, C. 8282.
Baloch, A.L. 2505.
Baltrachev, A.K. 159.
Balz, R.H. 3377, 6196, 6212.
Baluch, M.A. 3022.
Balzarini, J. 6073.
Bamba, K. 715.
Bambridge, J.M. 2220.
Bambura, O.I. 9760.
Bamforth, J.W. 8405.
Ban, S.N. 2877.
Banauch, D. 9708.
Banbura, W. 3532.
Bancroft, K. 8956.
Bandler, R. 225, 4775, 4776.
Bandaru, D. 4887.
Bandu, M.T. 2484.
Bandy, D.M. 8929.
Bandopadhyay, R. 323.
Bandopadhyay, R. 8491.
Banerjee, A.B. 7877, 7931.
Banerjee, A.K. 7597, 8195.
Banerjee, D. 5013.
Banerjee, M. 901.
Banerjee, P.C. 13.
Banerjee, S.K. 1560.
Banfali, G. 8238, 8264.
Bang, M. 7848.
Bang, W.-G. 9126, 9160.
Banishemi, Z. 1364.
Banishemi, Z. 5062.
Banik, S. 3187, 3188, 3214, 4195, 4225, 5891, 9533.
Banker, D. 2409.
Banker, G. 5345.
Bankers, D.J. 5047.
Banks, J.G. 9267.
Bannar, H. 5610.
Banner, M.J. 4742.
Banoub, J.H. 6185.
Banovska, O.V. 8943.
Bansal, M.B. 2516.
Bantian, E.E. 1242, 1304, 1764.
Bannville, G.-J. 4017.
Banwart, G.J. 1799, 3581.
Banzato, D.J. 5844.
Baquero, F. 6234.
Bar-Joseph, M. 2981, 3897, 5783, 9378.
Bar-Lev, S.S. 5084.
Barak, Z. 3721.
Baranov, E.P. 8013.
Baranova, I.P. 2587, 8019.
Baranova, S.I. 2494.
Baranowski, J.D. 1555, 2448.
Barash, I. 1322.

- Baratti, J. 5466, 7514.
 Barbara, D.J. 3037, 3529, 9441.
 Barbaree, J.M. 2684.
 Barbe, G. 9886.
 Barbe, M.C. 896.
 Barber, D. 114, 4556.
 Barber, D.A. 582.
 Barber, M.J. 2783, 3734.
 Barbet, A.F. 6379.
 Barbieri, M.J. 8537.
 Barbier, M. 675, 7444, 7554.
 Barbieri, C. 4434.
 Barbours, E.K. 3461.
 Barbuti, S. 7084.
 Barcena, J.A. 1868.
 Barczyk-Luczykowska, K. 2659.
 Barcin, R. 1446.
 Barea, J.M. 4204.
 Barefoot, S.F. 7172.
 Barenboim, G.N. 8013.
 Barends, P. 858.
 Barford, H.C. 4678.
 Barford, J.P. 2873, 8946, 8947, 9801, 9808, 9809.
 Bari, S. 6916.
 Barik, S. 848.
 Barist, I. 4761, 7381, 7460, 7462.
 Barkai-Golan, R. 5773, 8590.
 Barkalova, A.A. 9483.
 Barkat, G. 2034.
 Barkson, N. 879.
 Barker, D.G. 6532.
 Barker, H. 7701.
 Barker, J.S.F. 3048.
 Barker, K.R. 1282.
 Barker, S.A. 1856, 4864, 5504.
 Barker, T.W. 15, 8489.
 Barkley, W.A. 9806.
 Barksdale, B.L. 9837.
 Barksdale, T.H. 5048.
 Barlass, M. 469.
 Barlett, P.A. 69.
 Barlocco, G. 9732.
 Barnett, O.W. 335, 1147, 9326.
 Barlow, C.G. 4500.
 Barlow, J.J. 8252.
 Barnmore, C.R. 5802.
 Barna, B. 411, 3948, 4075.
 Barnabe, N. 7461, 8474, 7381, 7460, 4782.
 Barnes, D. 8960, 9092, 9995.
 Barnes, D.K. 6862, 7750.
 Barnes, G.L. 4535.
 Barnes, M.F. 4065.
 Barnes, T. 1776.
 Barneto, R. 7584.
 Barnette, W.C., Jr. 1147, 9326.
 Barnett, R.D. 9466.
 Barnick, J.W.F.K. 8916.
 Barnickel, G. 3714.
 Baron, D.L. 3862.
 Baron, R.C. 1710.
 Baron, S.S. 9112.
 Baron, S.S. 9112.
 Baross, J.A. 5129.
 Barot, M.S. 9277.
 Barr, K. 1892.
 Barraque, V.L. 3822.
 Barraque, W.L. 9596.
 Barrat, J.G. 3031.
 Barreil, J.A. 7574.
 Barrell, R.A.E. 189, 1075.
 Barrelet, E. 2921.
 Barrell, E.L. 8263.
 Barrell, T.J. 9920.
 Barretto, W.C., Jr. 4588.
 Barretts de Menezes, T.J. 1051.
 Barron, G.L. 9545.
 Barros, B.C. 2273.
 Barroso Pereira, L.O. 7106.
 Barrow, G.J. 851.
 Barrow, N.J. 9547.
 Barrow, P.A. 7250.
 Barrows-Broadbent, J. 6909.
 Barry, A.L. 737, 2536, 6117, 6120, 6145, 7181, 7980, 8041, 8760, 9742, 9745, 9746.
 Barry, D.W. 9653.
 Barry, M. 8963.
 Barry, S. 10004.
 Barshtein, Yu.A. 1584.
 Bartelt, W. 3477.
 Barth, G. 7309.
 Bartha, M. 4066.
 Bartha, R. 4748.
 Bartholmes, P. 4629.
 Bartholomew, G.W. 2876.
 Barkova, G. 3891.
 Bartleson, C.A. 235, 1066, 1067.
 Bartlett, A.J. 4898.
 Bartlett, C.L.R. 1706.
 Bartlett, F.M. 8291.
 Bartlett, J.G. 5174.
 Bartley, E.E. 6680.
 Bartmann, K. 3430.
 Bartner, P. 8908.
 Barto, P.B. 4869.
 Bartoshevich, Yu.E. 975, 4375, 6140, 6154, 6160.
 Bartoszcze, M. 3353.
 Bartov, I. 3852.
 Bartz, J.A. 1330.
 Baruah, J.N. 4222, 9632.
 Barz, W. 3764, 8434.
 Barza, M. 777.
 Bas, C. 1057.
 Basak, S.C. 3338.
 Basarova, G. 6585, 7518, 7520.
 Bascomb, S. 1795.
 Baseby, L.J. 9273.
 Basel, R.M. 3581.
 Baselski, V.S. 2512.
 Bashan, Y. 410, 412, 3065, 6842, 8575, 9335.
 Bashandy, E.Y. 8982.
 Bashi, E. 424, 6821, 6822, 9391.
 Bashkovich, A.P. 6170.
 Basilio, G.I. 1774.
 Baskakova, A.A. 7123.
 Basker, D. 2034.
 Basker, M.J. 2506, 6216.
 Baskerville, M. 5334.
 Bassalini, J.F. 7976.
 Bassett, E.N. 5074.
 Bassette, R. 183.
 Basu, A., Jr. 1179.
 Basson, N. 879.
 Bastide, J. 5904.
 Bastide, J.-M. 2477.
 Bastide, J.M. 3337.
 Bastide, J.M. 2477, 3337.
 Bastos Hildebrandt, J.P. 6281.
 Bastow, K.F. 6078.
 Basu, A. 3659, 7927.
 Basu, A.N. 6847.
 Basu, M. 5013.
 Basu, S. 7439.
 Bata, A. 4897.
 Batanian, N.V. 1543.
 Bato, J. 885.
 Bateman, G.J. 491, 507, 8645.
 Bates, F.Y. 9726.
 Batik, O. 8967.
 Batino, E.B. 1432.
 Batish, V.K. 2919.
 Batley, B.S. 812.
 Batra, A. 7909.
 Batra, R.L. 373, 4012.
 Batson, W.E. 1301.
 Batt, C. 3864.
 Battaglia, M. 9853.
 Battat, A. 7162.
 Battatby, A.R. 6533, 6563.
 Battistini, C. 1611.
 Battistotti, B. 8480.
 Batzing, B.L. 6054.
 Bauch, J. 2015, 5991.
 Baumann, G. 1282.
 Baudoin, A.B.M. 2146.
 Bauer, J. 4892.
 Bauer, S. 3685.
 Bauer, S.H. 9727.
 Bauer, W.D. 2112, 3237.
 Bauerfeind, A. 4349, 7091.
 Baugh, C.L. 3316.
 Baumann, L.F. 9451.
 Baumann, G. 8585.
 Baumann, A. 1032.
 Baumgartner, M. 7993.
 Baumgartnerova, H. 2144.
 Beave, U.K. 3403.
 Bavor, H.J. 5595.
 Bowden, A.D. 6977.
 Baxter, J.A. 6697.
 Baxter, L.W., Jr. 2190.
 Bayer, H. 5969.
 Bayliss, K. 128, 3817.
 Bayley, A.C. 1100.
 Bayliss, M.E. 956, 8255.
 Bayne, H.G. 1502.
 Bays, J.S. 1798.
 Bazhanov, V.S. 7166.
 Bazhanova, I.G. 3450.
 Bazhenov, L.G. 1600.
 Bazin, M.J. 2357.
 Bazzi, C. 1306, 3064.
 Beagle-Ristaino, J.E. 4935, 5669.
 Beagle, J.E. 1135.
 Beakes, G.W. 3142, 5931.
 Beal, R.H. 5086.
 Beale, M.A. 3175.
 Beale, M.H. 2853.
 Beam, B.L. 3609.
 Beamman, K.D. 9220.
 Bean, G.A. 4901, 7620, 8501.
 Beard, C.W. 8923.
 Beard, T.H. 5862.
 Bearder, J.R. 2853.
 Beards, G. 1308.
 Beards, G.M. 1743.
 Beardsmore, A.J. 9982.
 Beasley, J.N. 2835.
 Beatty, H. 2459.
 Beaudat, J.-L. 8272.
 Beaudet, R. 6047.
 Beaumont, A. 4253.
 Beccaro, P.V. 4859.
 Bech, K. 5826.
 Bechel, J. 2070.
 Bechina, E.M. 1913.
 Beck, D. 9109.
 Beck, S.M. 4237.
 Beck, T. 5980.
 Becker-Raterink, S. 1216.
 Becker, C.E. 178.
 Becker, H. 5416.
 Becker, J.J. 5349.
 Becker, J.M. 6542, 7170.
 Becker, J.U. 7359.
 Becker, J.E. 2529.
 Becker, S. 4847.
 Becker, Y. 3364.
 Beckers, B. 8125.
 Beckett, A. 5695.
 Beckett, E.E. 3601.
 Bechtum, M.W. 663.
 Beckman, C.H. 4086.
 Beckman, P.M. 3957.
 Beckwith, D.G. 9899.
 Becvar, J.E. 4633.
 Beczner, L. 2995, 3068, 3077.
 Bedard, L. 3480.
 Bedondo, I.P. 3951.
 Bedker, P.J. 2314, 9525.
 Bednar, J. 8208.
 Bednarek, M.A. 766.
 Bednaya, L.Z. 7958.
 Bedows, E. 6071.
 Bennett, F.B. 5.
 Beelman, R.B. 2712, 4742.
 Beer, S.V. 9371.
 Beer, W.W. 5728, 5730, 5809.
 Beeraj, R.D. 7855.
 Beerman, C.A. 2696.
 Beerley, H. 1551.
 Beever, R.E. 6022, 9650.
 Beevi, S.N. 1034.
 Beizer, A.E. 7272, 8008, 8758.
 Beg, S.A. 9797.
 Beggs, W.H. 2483, 5201, 6061.
 Begtol, H. 7615.
 Begon-Lours-Guyamarho, J. 2484.
 Begtrup, J. 6816, 6823, 7226.
 Begueret, J. 3274.
 Behara, N. 7824.
 Behling, A.R. 121.
 Behlke, J. 2523.
 Behmer, C.J. 5231.
 Behnke, C.E. 1882.
 Behnke, U. 2761.
 Behrendt, U. 9126.
 Behrens, U. 5483, 6396, 7309.
 Beicht, W. 8536.
 Beiderbeck, R. 4029, 8574.
 Beier, R.C. 8508.
 Beilhaar, V.C. 3631.
 Beintema, J.J. 7400, 7402.
 Beishir, L. 9091.
 Bekkerford, R.M. 1557, 3615.
 Bekke, S. 6772.
 Bekker, M.J. 1839, 2747, 9110.
 Bekere, V.F. 9110.
 Bekova, P. 7735.
 Bekhoev, I.D. 449.
 Bekimirov, T.A. 1770, 9869.
 Belach, J.P. 2890.
 Belanger, A. 8705.
 Belda Montero, M. 8729.
 Belden, E.L. 5800.
 Belletsky, O.P. 7267.
 Belkoff, M. 9892.
 Belkova, A.V. 2260.
 Belic, I. 3773.
 Belikovskiy, V.I. 3191.
 Bell, A.A. 1336.
 Bell, A.C. 4044.
 Bell, A.W. 2786.
 Bell, K. 367.
 Bell, D.M. 9855.
 Bell, G.D. 2430.
 Bell, J.B. 7879.
 Bell, L.E. 9087.
 Bell, R.A. 7475.
 Bell, R.G. 2029, 4872, 6678.
 Bellamy, W.D. 2907.
 Belli, G. 1287.
 Bellinck, C. 5926, 5928.
 Bellucco, G. 8040.
 Bely, R.T. 5162, 8427.
 Belobrov, P.I. 6479.
 Belov, J.C. 4411.
 Belovizovska, S.E. 8830.
 Belovizanova, L.V. 1055, 9626.
 Belokrysenko, S.S. 6335.
 Belousova, T.O. 2019.
 Belov, A.P. 7868.
 Belova, T.N. 5159.
 Beltrami, M. 2762.
 Belyaev, D.L. 686.
 Belyaev, S.S. 3260.
 Belyaeva, N.A. 2681.
 Belyaeva, R.Kh. 7392.
 Belykh, R.A. 661.
 Belykova, V.A. 8943.
 Ben-Ghedalia, B. 1062.
 Ben-Ghedalia, D. 2009, 4751, 4870, 5633, 5634.
 Ben-Hur, E. 2450, 8496.
 Ben-Joseph, Y. 424.
 Ben-Shalom, N. 6660.
 Benda, G.T.A. 9468.
 Bendall, M.J. 2399.
 Bendas, L.G. 5411.
 Bendayan, M. 1750.
 Bender, Z. 257, 5108.
 Bender, R. 6431.
 Bendova, O. 9101.
 Benekes, E.S. 1528.
 Benetjee, U. 8036.
 Benes, S. 9961.
 Benichou, M. 8597.
 Benisek, W.F. 5489.
 Benitez, T. 4738.
 Benito de Cardenas, I.L. 4721.
 Benko, M. 4897.
 Beniloch Padilla, M. 4284.
 Benloch, M. 2541.
 Benmansour, A. 3552.
 Benmoussa, H. 1062.
 Bennasar, M. 4782.
 Bennejean, G. 190.
 Bennet, H.J. 1316.
 Bennett, A.D. 9649.
 Bennett, F.A. 2263.
 Bennett, J.W. 5649.
 Bennett, L. 4255.
 Bennett, L.L., Jr. 7104.
 Bennett, R.D. 5531.
 Bennett, R.W. 1091.
 Benoit, H. 5653.
 Benno, Y. 9051.
 Benoit, R.E. 2900.
 Benonis, E. 7074, 7076.
 Bensch, W.R. 8227.
 Bensink, J.C. 7030.
 Benson, B.L. 9386.
 Benson, C.P. 4657.
 Benson, D.M. 324, 1282, 5872, 9386, 9389, 9419.
 Bentley, R. 6628.
 Bentzon, M.W. 2413, 3378.
 Bentz, G. 2533.
 Bepko, T. 1547, 1672, 8028, 8029, 9219.
 Beranek, D.T. 9023.
 Berbee, F.M. 3740.
 Berbee, J.G. 316.
 Berch, S.M. 2327.
 Berdal, B.P. 1109, 2961, 3896, 5655, 7239.
 Berdichevskaya, M.V. 627, 2387.
 Berdikovna, T.F. 1641, 7165.
 Berenguer, J. 2555.
 Berensford, R.M. 431.
 Berestennikova, N.D. 2390.
 Berestetsky, O.A. 551, 9554.
 Beresin, I.V. 4579.
 Beresina, O.N. 1583, 9686.
 Berg, B. 2299, 2300, 3161.
 Berg, C.C. 3101, 6688.
 Berg, D. 5267.
 Berg, D.D. 667.
 Berg, J.N. 7121.
 Berg, J.O. 7377.
 Berg, L. van den 8930.
 Berg, P. 617.
 Berg, S.W. 5242.
 Bergami, E. 3495.
 Bergan, T. 7895, 7905.
 Bergdahl, D.R. 8659.
 Bergdahl, M.D. 1150, 6727, 7644.
 Bergendal, B. 6290, 6281.
 Berger-Degue, M. 2852.
 Bergh, L. 4860.
 Berger, P.H. 3536, 5704.
 Berger, Y. 2852.
 Bergeron, G. 2532.
 Bergersen, F.J. 9615.
 Bergman, E.L. 3033.
 Bergman, R. 2916, 4496.
 Bergner-Rabinowitz, S. 3300.
 Bergsma, J. 966.
 Bergstrom, G.C. 1248, 9081.
 Bergua, C. 740.
 Bergholm, M.A. 5409.
 Berkashvili, V.Sh. 6482.
 Beringer, J.E. 5937.
 Berkowitz, L.B. 3417.
 Berlich, U. 6324.
 Berman, D.T. 1827.
 Berman, R.E. 2080.
 Bernard, A. 8412.
 Bernard, F. 2955.
 Bernard, S.L. 5369.
 Berndt, W.B. 7857.
 Bernhard-Reversat, F. 5099.
 Bernhardt, F.H. 2790.
 Bernier, C.G. 2253.
 Bernier, R. 7378.
 Bernius, S.M. 3451.
 Bernhor, R.W. 6410, 6435.
 Berovic, M. 5469.
 Berry, B.W. 241, 267, 7598.
 Berry, C.R. 2302.
 Berry, D. 8941.
 Berry, D.R. 6556.
 Berry, M.R., Jr. 1093.
 Berry, P.L. 2680.
 Berryhill, D.L. 3159.
 Berryman, A.A. 8651.
 Berschauer, F. 9280.
 Berstein, E.M. 6170, 7972.
 Berstein, I.Ya. 6180.
 Bersohn, R. 920.
 Bertagnoli, A. 3040.
 Bertagnoli, C.L. 9519.
 Bertini, R. 7468.
 Bertheau, Y. 9560.
 Berthelin, J. 4190, 7014.
 Berthelot, P. 5188.
 Berthelsen, J.E. 1250.
 Berti, M. 7183.
 Bertolani, D. 2436.
 Bertoni, M. 2439.
 Bertoni, E. 6187.
 Bertoni, P.F. 5736.
 Berwick, P. 8665.
 Bern, M.K. 4734.
 Bern, R. 7550.
 Besada, W.H. 3082.
 Beskid, G. 9715.
 Besl, H. 8042.
 Bessonova, I.A. 1983.
 Bestwick, R. 5875.
 Bethany, R.L. 6986.
 Bethenthalyav, G.J. 1502.
 Bethune, J.L. 2770.
 Bethrich, M.R. 5111.
 Betrabet, S.M. 7769.
 Betru, C. 7984.
 Bettany, R.L. 9386.
 Bettelheim, K.A. 1112, 4484.
 Betti, C. 4324.
 Betzold, J.A. 4982, 6792.
 Beuchat, L.R. 2039, 5636.
 Beucher, M. 8976.
 Beuchet, R. 1043.
 Beule, M.K. 474, 1123, 3511, 4937.
 Beuther, E. 1401, 8319.
 Beuvery, E.C. 4430.
 Bevan, B.J. 9015.
 Bevan, C. 952.
 Bevan, R.R. 1083.
 Bevan, R.J. 4181.
 Bevan, C.B. 2113.
 Beveridge, T.J. 4257.
 Bevz, N.I. 1596.
 Bezvenko, V.A. 2095.
 Bezzen, R. 1049.
 Bey, C.F. 5874.
 Beyreuther, K. 4.
 Bezborodov, A.M. 1857, 1864, 1877, 6462.
 Bezubov, A.A. 5572, 6639.
 Bhaduri, A. 5494.
 Bhagat, S.D. 9632.
 Bhagat, S.K. 3473.
 Bhai, A. 5205.
 Bhale, P. 6666.
 Bhalarao, U.T. 6084.
 Bhalashudu, C. 7695.
 Bharat, G. 751.
 Bhargwal, S.P. 3152.
 Bhargava, K.V. 4845.
 Bhargava, K.S. 7934.
 Bhargava, S.N. 5804.
 Bhaskaran, C.S. 3264.
 Bhaskaran, S. 1302.
 Bhat, R.V. 3863.
 Bhat, S.S. 3018.
 Bhatia, A. 5726.
 Bhatia, C.R. 4059.
 Bhatia, R. 893, 3403.
 Bhatia, S.K. 9495.
 Bhatnagar, L. 3549.
 Bhatt, C.S. 8210.
 Bhattacharjee, J.K. 34.
 Bhattacharya, M. 2064.
 Bhattacharya, P.K. 3975.
 Bhattacharya, C.R. 5970.
 Bhattacharya, A. 7927, 8635.
 Bhatti, M.H. 4115.
 Bhatti, M.H.R. 4045.
 Bhide, V.P. 5933.
 Bhowmik, B.N. 7756, 7794.
 Bhowmik, S. 5974.

- Bhullar, G.S. 5726.
 Bhunibhamon, M. 7094.
 Bhuvaneshwari, T.V. 2112.
 Blache, G. 9208.
 Bialkowski, M. 4785.
 Bianchi, A.J.M. 870.
 Bianchi, M.A.G. 870.
 Bianchi, M. 6594.
 Bianco Coletto, M.A. 2496.
 Bianco, P. 6546.
 Bibb, W.F. 37, 3475.
 Bibikova, M.V. 1670, 6107.
 Bickelhaupt, F. 4405, 4406, 8916.
 Bicknell, B. 6980.
 Biele, J. 3391, 7078.
 Biddle, J.W. 5111.
 Bidwell, J.L. 1541.
 Biehl, H. 5563.
 Bielazewska, M. 3887, 6729.
 Bielecki, S. 7583.
 Bielka, F. 5729, 5730, 5809.
 Biellmann, J.F. 934.
 Biellmann, J.-F. 627.
 Biely, P. 1869.
 Bielenkowsky, P. 2325, 3753.
 Biernacki, C.J. 2323.
 Biers, M.R. 1723.
 Bigelis, R. 2760, 3724.
 Biggs, A.R. 9520.
 Bigio, M. 8514.
 Bigley, D.V. 2621.
 Bigley, R.H. 2429.
 Bigler, S. 2493.
 Bikova, S.P. 2013.
 Bikunova, A.N. 298.
 Bilal, T.I. 1922, 1929.
 Bilalau, A. 6098.
 Bille, L. 9222.
 Bilgrami, K.S. 3874.
 Bilic, R. 2076.
 Bilko, P. 1612.
 Billelt, W. 3015.
 Billodeaux, J. 6597.
 Bimler, J. 3977.
 Bills, S. 4822.
 Bilous, D. 2799.
 Bin Ahmad, K. 3130.
 Bindal, M.C. 6044.
 Binder, H. 8083.
 Binder, U.D. 2437.
 Bindschedler, O. 1791.
 Binggeli, R. 1781.
 Binghaw, R.T. 8618.
 Binn, L.N. 9852.
 Binners, J.S. 858.
 Binning, L.K. 1387.
 Binta, G.M. 3837.
 Binta, M.G. 1069, 2051.
 Birch, S.J. 191.
 Bird, C.W. 4420.
 Bird, G.W. 5842.
 Bird, M.M.E. 2694.
 Birdsall, B. 2785.
 Birgen, J.K. 7680.
 Birk, R.J. 9743.
 Birkhead, D. 6282.
 Birken, K. 3299.
 Birnova, L.V. 8860.
 Birnbaum, S. 4582, 8127.
 Biryukov, V.V. 2564, 4394, 6402, 6492.
 Biryukova, I.V. 1821.
 Birshtal, R.M. 7041.
 Bisailon, J.G. 784.
 Bisaria, R. 7596.
 Bishop, C.D. 6825.
 Bishop, M. 1931.
 Bischof, P.L. 5300, 7193.
 Bist, W.S. 4942.
 Biskupiak, J.E. 8910.
 Bismuth, E. 8701.
 Bismuth, R. 8813.
 Bispig, B. 1257.
 Bisset, D.L. 4653, 6426, 6443.
 Bitter, K.G. 943.
 Bitnatne, J. 4688.
 Bitman, J. 5175.
 Bitsaev, A.R. 2522.
 Bitterrova, F. 7955.
 Bittner, J.B. 8754.
 Bittner, J. 7130.
 Bitton, G. 1798, 2613, 8979.
 Bjarki, M.E. 5703.
 Bjorkhem, I. 9020.
 Bjorklund, E. 3893.
 Bjorksten, F. 7607.
 Black, A.P. 6282.
 Black, J. 2598.
 Black, L.L. 5772.
 Black, L.T. 135, 4699, 9227.
 Black, M.E. 7243.
 Black, R.E. 4847.
 Black, W.A. 710.
 Blackall, P.J. 5410.
 Blackbeard, J.R. 6654.
 Blackburn, B.O. 6004.
 Blackburn, C.K.L. 9013.
 Blackman, E. 9637.
 Blackmore, D.K. 7566.
 Blackwell, J.H. 4767.
 Blackwell, L.F. 8155.
 Blaghen, M. 8727.
 Blair, R. 4019.
 Blain, J.A. 1874.
 Blair, D.F. 9148.
 Blair, L.L. 3408.
 Blaise, T. 8649.
 Blais, N.J. 2042, 4765, 8968.
 Blake, P.A. 1078, 9920.
 Blake, P.S. 1398, 2800, 2281.
 Blakeman, J.P. 1332, 1379, 3147.
 Blaker, N.S. 3994.
 Blanc, B. 2036.
 Blakley, E.R. 1053.
 Blanch, H. 9068.
 Blanch, H.W. 11, 9237, 9803.
 Blanchard, D.C. 4495.
 Blanchard, R.O. 1438.
 Blanchette, R.A. 538, 548.
 Blanchet, L. 1458, 2314, 5890, 6936, 9525.
 Blanchfield, B. 222.
 Blanco-Lopez, M.A. 9416.
 Blanco, M.H. 1346.
 Bland, M.A. 8500.
 Blandino, G. 2474, 2482, 4364, 7092, 8810.
 Blaney, B.J. 3866.
 Blank, G. 5180.
 Blank, J. 5258.
 Blankenagel, G. 220.
 Blankenship, L.C. 187.
 Blankenship, P.D. 2988, 5664.
 Blaschek, H.P. 2865.
 Blaschke, H. 4150.
 Blaser, M.J. 173, 2040, 5169, 9977.
 Blaser, P. 3819.
 Blaszczyk, W. 7555.
 Blaszczyk, W. 7519.
 Blatchford, N.R. 4274.
 Blachquet, S. 953.
 Blazquez, C.H. 5768.
 Blazquez, B.H. 1968.
 Bledsoe, C.S. 518.
 Bleeg, H.S. 56.
 Bleuze, P. 3600.
 Blevins, D.G. 8694.
 Bley, T. 4264, 4266.
 Bickstead, E. 5639.
 Bright, M.M. 5661.
 Bliss, P.J. 8960, 8995.
 Blisse, A. 4538.
 Blobel, H. 6324.
 Blocher, J.C. 8497.
 Block, J.C. 6251, 8117.
 Block, J.H. 8764.
 Blomberg, J. 9858.
 Blondin, B. 4744, 5513.
 Bloomberg, W.J. 5858.
 Bloomfield, S.F. 4500.
 Bloomster, J.T. 2084.
 Bount, J.F. 2822, 6193.
 Blows, W.M. 539.
 Bluemel, W. 3814.
 Bluthgen, A. 2067.
 Blum, J.E. 9802.
 Blumauerova, M. 782, 5540.
 Blumerthai, R.M. 7041.
 Blumer, J.L. 8841.
 Blunt, J.W. 688.
 Board, R.G. 9267.
 Bob, J. 7561.
 Bob, T.G. 6180.
 Bobb, A.D. 2181.
 Bobylev, R.V. 8515.
 Bobyr, A.D. 1386, 9483.
 Boccardo, G. 8561.
 Boccas, B. 5015.
 Bocci, A.M. 1374.
 Boccu, E. 4638.
 Bob, F. 7537.
 Bock, R.K. 1375, 4921, 9413.
 Bockelman, D.L. 4949.
 Bockelman, H.E. 5703.
 Bocker, H. 8038.
 Bockus, W.W. 5067.
 Bockus, I. 7735, 8603.
 Bodanszky, M. 766.
 Boddy, R.M. 4246, 9609.
 Boddy, L. 4158, 5860, 5861, 9530.
 Bodely, G.P. 4362.
 Bode, G.P. 3322, 7977, 7979.
 Bodine, A.B. 3882.
 Bodini, F. 8480.
 Bodo, B. 5555.
 Bodonai, N.C. 8726.
 Bodunkova, L.E. 2394.
 Boecker, R. 51.
 Boeck, A. 2423.
 Boega, U. 7292, 7293.
 Boehm, A.M. 9927.
 Boehm, H.O. 6290.
 Boehm, K.J. 7428.
 Boehm, R. 855, 8772.
 Boehm, W. 897.
 Boehmel, H. 6321.
 Boehni, E. 6035.
 Boening, P.H. 5325.
 Boesman-Finkelstein, M. 4916.
 Boettger, M.A. 1365.
 Bof, M. 8268.
 Boffi, V. 8201.
 Boga, M.M. 8433.
 Bogdanova, I.S. 1597, 3615.
 Bogdanova, L.D. 8804.
 Bogdanova, L.F. 3388, 7966.
 Bogden, A.E. 4285.
 Boggs, B.W. 564.
 Bogokowski, B. 3386.
 Bogomolov, R.A. 4561.
 Bogoyavlenskaya, L.B. 7236.
 Bohl, W.H. 3921.
 Bohland, D. 2015.
 Bohlool, B.B. 597, 3235, 4249, 785.
 Bohm, G. 1243.
 Bohne, L. 1945.
 Bohnhoff, M. 776.
 Boiko, I.I. 3523.
 Boikova, I.V. 1654.
 Boissard, J.M. 6534.
 Boissau, G. 1243.
 Bojanovski, M. 6447.
 Bojarsky, V. 2163, 2242.
 Bojnasky, V. 2242.
 Bokadia, M.M. 7909.
 Bokkenheuser, V.D. 9277.
 Bokor, A. 8538.
 Bolan, N.S. 9547.
 Boland, H.J. 8694.
 Bole, J.B. 5129.
 Bolet, B. 9211.
 Bolkan, A.A. 6818.
 Bollag, J.M. 1489.
 Bolle, A.C. 4884.
 Bollin, G.J. 5836.
 Bolter, B.C. 9578.
 Bollrich, C.N. 5039.
 Bolobova, A.V. 9188.
 Bolshakova, L.O. 2559.
 Bolton, F.J. 2676, 5400.
 Borman, H.G. 1551.
 Bomar, M.T. 435.
 Bompeix, G. 4081.
 Bonamy, A.-M.J. 7406.
 Bouchard, D. 6899.
 Bouchard, D.H. 1504, 9555.
 Bouckaert-Urban, A.-M. 3060.
 Boude, M. 8113, 9886.
 Boudet, A.M. 7550.
 Boudinskaya, E.V. 449.
 Boudon, E. 507.
 Boudonko, V.I. 2708.
 Boudouvalas, J. 5504.
 Bouk, F. 3450, 3456.
 Boulanger, P. 7434.
 Bournigall, J. 8161.
 Bourmout, A.-M. 7122.
 Bourne, J.R. 5433.
 Bourrat, C. 1681.
 Bousquet, J.-F. 7444.
 Boutelle, J. 5514.
 utin, B.K. 2912, 4903.
 Bouton, J.H. 385.
 Boutry, J.-L. 7554.
 Boutwell, J.L. 4887.
 Boucher-Hertzberger, S.A. 1076.
 Boucher, E.J. 5136, 5290.
 Bouwer, E.J. 5291.
 Bouzard, H. 3971.
 Bouvillat, A. 2644.
 Bowe, J.M. 3970, 9448.
 Bover-Lapierre, G. 4552.
 Bouville, A. 233, 1077.
 Bowden, G.H. 4497.
 Bowden, R.L. 1170, 1179, 5702, 9350.
 Bowden, G.S. 7202.
 Bowen, K.L. 1462.
 Bowen, W.H. 5354.
 Bower, S. 5488.
 Bowers, R.J. 1613.
 Bowie, W.R. 6162.
 Bowman, J.E. 2269.
 Bowler, R. 499, 1427.
 Bowski, L. 9004.
 Box, J.A. 4325.
 Box, S.J. 1663, 6216.
 Boy, N. 480.
 Boyce, J.M. 4381.
 Boycott, B.R. 3868.
 Boyd, M.R. 3359.
 Boyet, D.J. 7749.
 Boyet, W.S. 2125.
 Boye, E. 6339.
 Boyer, C.D. 8699.
 Boyer, J.M. 4308.
 Boyer, K.M. 5392.
 Boyer, R.F. 8443.
 Boyer, S. 1475.
 Boyle, C.E. 9344.
 Boyle, T.H. 7729.
 Boyne, J.V. 3759.
 Boytsina, S.E. 8276.
 Bozozki, J.P. 8774.
 Braaksma, A. 7420.
 Brackner, C.E. 9344, 9345.
 Brackett, R.E. 280, 281, 282, 283.
 Bradaczek, H. 3714.
 Bradbury, E.M. 1903.
 Brade, H. 1779, 5536, 6567.
 Bradford, B. 3983, 5785.
 Bradford, H.B. Jr. 6259, 8136.
 Bradute, O.E. 1200.
 Bradley, G. 3440, 580.
 Bradley, D.E. 9879.
 Bradley, D.W. 5367, 5486.
 Bradley, J. 2514.
 Bradley, R.J. Jr. 2632.
 Bradner, W.T. 983.
 Bradshaw, A.D. 603.
 Bradshaw, A.P.W. 3729.
 Bradshaw, J.G. 1093, 2912.
 Brady, L.M. 649.
 Braine, D.M. 626.
 Brain, G.J. 1789.
 Brashaw, M. 309.
 Bratburg, J. 1633, 2591.
 Bratkhoff, G.J. 858.
 Brakke, M.K. 6779.
 Bramley, A.J. 6038.
 Brana, A.F. 2620.
 Brana, M.F. 3358.
 Brandis, H. 3317, 6710.
 Brandt, M.J. 239.
 Branem, A.L. 2035.
 Brankova, R. 8116.
 Brant, P.C. 8485.
 Braselton, J.P. 9428.
 Brashaw, D. 8546.
 Brashar, D.A. 7195.
 Brasher, M. 1758.
 Brasseur, R. 1739.
 Brathwaite, C.W.D. 1305.
 Bratova, M. 3302, 3519.
 Bratova, J. 3503.
 Braum, D.G. 305.
 Braun, K. 129.
 Braun, R. 6708.
 Braun, S.D. 9217.
 Braun, V. 2465.
 Bravova, G. 9112.
 Branner, E.R. Jr. 3490.
 Brayer, L. 8075.
 Brayton, P.R. 9948.
 Braz Filho, R. 7789.
 Brachnikova, M.G. 779, 1642.
 Brachnikova, J. 7545, 7992, 8018.
 Brachnikova, J. 7728.
 Brdar, B. 3342.
 Breant, B. 4599.
 Breen, P.J. 6983.
 Breeze, A.S. 3276, 3415.
 Bregman, D.J. 710.
 Brenerova, E. 1036.
 Brendl, M. 1752.
 Breinig, M.K. 7108.
 Breinhaupt, B.H. 7828.
 Brenner, N. 9832.
 Brekke, J.C. 2035.
 Brenner, H.A. 8495.
 Brencigiani, M.J. 8816.
 Brenner, D.J. 2666, 3475.
 Brent, K.J. 504.
 Breskav, K. 6468.
 Bresler, E.E. 1580.
 Bresnan, R.A. 3902.
 Bresnel, K. 129.
 Brewer, E. 5208.
 Breward, C. 6391.
 Brewer, J.M. 6544.
 Brewer, P.F. 8674.
 Brewer, R.A. 6372.
 Brewster, N.J. 5120.
 Breyer, S. 7139.
 Briznova, L. 8811.
 Brians, M.J. 828.
 Brice, M. 2620.
 Brink, P. 6535.
 Brink, D. 499, 1427.
 Brincot, F. 3531, 6292.
 Brindley, J.D. 9180.
 Bridges, J.R. 3859.
 Brien, H.M.R. 9650.
 Brienza, A. 9747.
 Brienley, C.J. 5135.
 Bringham, D.J. 7571.
 Bringham, D. 7940.
 Bright, J.S. 5335.
 Bright, J.P. 2472.
 Brinkenstein, V.Kh. 8013.

- Briley, M.R. 7085.
 Brill, W.J. 3228, 7008, 7010.
 Brilinger, G.-J. 8877.
 Brim, C.A. 9580.
 Brimacombe, R. 7829.
 Brink, E.W. 9859.
 Brinno, J. 2943.
 Brisbane, P.G. 7256.
 Britz, T. 8209.
 Brissin, J.D. 8100.
 Brito, K.K. 953.
 Britton, K.O. 1217.
 Britton, P. 4906.
 Britz, M.L. 3294, 9174.
 Bro, J. 5287.
 Brodzus, E. 855.
 Brizzi, V. 8861.
 Brilansky, R.H. 320, 1153, 1204, 8565, 8576.
 Broadbent, F.E. 5126.
 Broadhead, D.M. 3016.
 Broady, K.W. 3711.
 Brock, A. 996.
 Brockelhurst, T.F. 3812, 8479.
 Brockman, F. 7841.
 Brockman, R.W. 7104.
 Brockwell, J. 5116, 5954.
 Brodsky, T.F. 9764.
 Brodellus, P. 1845, 8127.
 Broderick, A.J. 1809.
 Broderick, L.S. 5143.
 Brodeur, B.R. 1780.
 Brodeur, J.P. 8823.
 Brodinova, N.N. 7374.
 Brodsky, M.H. 3512, 3575.
 Broemme, D. 3865.
 Broggio, R. 6130.
 Bromberg, K. 9009.
 Bromfield, E.S.P. 887, 890, 7821.
 Bromfield, K.R. 383, 2130, 5066, 6858.
 Bromfield, S.M. 573.
 Bron, S. 9121.
 Bronnikov, Yu. N. 9734.
 Bronov, L.V. 770, 2594, 2596.
 Bronstein, M.L. 1585.
 Brooke, A.R. 4804.
 Brookes, P.C. 572, 4220.
 Brooks, B.O. 3480.
 Brooks, F.L. 9903.
 Brooks, J.D. 8196.
 Broome, M.C. 4813, 7569.
 Brooks, C.O. 385.
 Broquist, P.F. 7500.
 Brown, J.E. 7133, 7893, 9736.
 Brosseau, J.D. 124, 3694.
 Brown, A. 8779.
 Brosmer, R. 307, 1108.
 Broster, M.G. 9897.
 Brothers, N.P. 6623.
 Brotherson, J.D. 5887.
 Brown, J.M. 8468.
 Broughman, R.W. 2364, 6981.
 Broughton, C.W. 2623.
 Broughton, W.J. 9996.
 Brouwers, G. 3060.
 Browder, L.E. 3932.
 Brown, G.R. 2906.
 Brown-Skrobot, S.K. 5068.
 Brown, A. 314, 9128, 9902.
 Brown, A.E. 3000, 3019, 3999, 4070, 5733, 5797.
 Brown, A.G. 2508.
 Brown, B.I. 6632.
 Brown, C. 171.
 Brown, C.A. 2938.
 Brown, C.M. 365, 445.
 Brown, D. 8423, 8436.
 Brown, D.F.J. 2463, 2514.
 Brown, D.R. 9900.
 Brown, E.A. 1184.
 Brown, E.M. 2697.
 Brown, F.V. 2527, 6127.
 Brown, G.E. 5802, 9452.
 Brown, G.W. 9964.
 Brown, J.A. Jr. 5318.
 Brown, J.F. 7449, 6799, 6800, 7712.
 Brown, J.M. 8376.
 Brown, J.S. 5722.
 Brown, J.W. 2936.
 Brown, K.F. 5477.
 Brown, K.H. 4847.
 Brown, L. 2080.
 Brown, L.G. 2623.
 Brown, L.H. 9908.
 Brown, L.R. 5068.
 Brown, L.R. 3111, 6260.
 Brown, M. 9871.
 Brown, M.F. 587.
 Brown, M.J. 1889, 1690.
 Brown, M.R. 8691.
 Brown, M.R.W. 657, 3608, 4480.
 Brown, N.L. 6508.
 Brown, P. 1892.
 Brown, R.M. 2554.
 Brown, R.M. Jr. 7473.
 Brown, S. 3391, 7078.
 Brown, S.L. 9920.
 Brown, S.W. 4520.
 Brown, W.D. 5640.
 Brown, W.H. 2945.
 Browne, M.L. 3359.
 Brownell, H.H. 2018.
 Brownell, K.H. 1171, 4160.
 Broxton, P. 2692, 7063.
 Broza, M. 999.
 Bruce, A. 2040.
 Bruce, J. 4305, 4779, 5390, 9102.
 Bruce, V.R. 3831.
 Bruch, M. 6080, 6277.
 Bruchet, G. 9504.
 Bruck, C. 4474.
 Bruck, R.I. 5063, 5867, 8530.
 Brucker, R.B. 8484.
 Brueck, K.P. 1148.
 Brueckler, J. 6324.
 Brueckner, H. 8010.
 Bruehl, G.W. 1194, 2284, 4087, 6852, 8451.
 Bruening, G. 3028.
 Brufani, M. 12, 8861.
 Bruggmann, S. 6285.
 Brugh, M. 8923.
 Bruhn, J.A. 1407, 1408, 5819, 8622.
 Bruinenberg, P.G. 98.
 Brunsma, B.L. 240.
 Brumfield, W. 8107.
 Brumfitt, W. 676, 4275, 8881.
 Brummer, E. 9986.
 Brun, W.A. 4248.
 Brune, G. 2603.
 Brunelli, A. 2478, 6875.
 Bruner, F. 4453.
 Bruneteau, M. 6576.
 Brundick, D. 2240.
 Brunk, D.D. 9426.
 Brunnert, H. 1999.
 Bruno, C.F. 8824, 9003.
 Brunon, M. 4614.
 Brunstein, I.Z. 6170, 8862.
 Brunt, A.A. 433.
 Brusch, M. 2741, 4552, 6546.
 Bruscolini, F. 1723.
 Brusewitz, G. 768.
 Brusnigina, N.F. 5159.
 Brust, R.A. 9953.
 Brustavetskaya, T.P. 8444.
 Bruton, B.D. 3117, 9470.
 Bruun, B. 8866.
 Bruun, C. 8896.
 Bruun, J.N. 860.
 Bruzesse, E. 9440.
 Bryan, B.A. 1511.
 Bryan, E.H. 8926, 9805.
 Bryan, F. 235.
 Bryan, F.L. 232, 1066, 1067.
 Bryan, J.E. 7720.
 Bryant, G.R. 1316, 5368.
 Bryant, R.E. 9826.
 Bryant, T.J. 4218.
 Bryant, T.N. 2775, 5391.
 Bryder, D.T. 1707.
 Bryzgunova, N.I. 4296.
 Brzobohaty, B. 6496.
 Bu'lock, J.D. 2727.
 Buble, G. 9685.
 BuBourdieu, J.C. 8502.
 Buc, H. 6433.
 Buchanan, C.E. 7135.
 Buchanan, D.W. 2224.
 Buchanan, S.A. 9610.
 Buchanan, T.M. 6328.
 Buchenauer, H. 693.
 Bucher, C. 9066, 9896, 9972.
 Buchner, V. 1246.
 Buchowski, M. 2063.
 Busby, H.V.A. 8679.
 Busch, A.W. 6241.
 Busch, R.H. 3125.
 Busche, R.M. 7603.
 Busey, P. 7665.
 Bush, J.A. 983.
 Bush, L.J. 4869.
 Bush, L.P. 7499.
 Bush, S.R. 246.
 Bushby, H.V.A. 3234, 5959.
 Bushby, M.B. 6034.
 Bushnell, M. 4332.
 Bushnell, M.E. 7397.
 Bushuev, V.N. 1838, 7296.
 Buss, G.R. 9463.
 Bussereau, F. 6088.
 Busta, F.F. 193, 4810, 8497.
 Bustro, F. 1906.
 Butcher, D.N. 5761.
 Butler, I. 1586.
 Butler, J.H.A. 7001.
 Butler, J.K. 5243.
 Butler, J.R. 62.
 Butler, K.L. 8679.
 Butler, M. 2468.
 Butler, W.R. 9638.
 Butner, J. 8979.
 Butt, D.J. 1201.
 Bultaire, D.H. 2803.
 Butzler, J.-P. 2422.
 Butzler, J.P. 2595.
 Buwalda, J.G. 564, 2329, 5101.
 Buyanovsky, G. 8665.
 Buzzell, R.I. 1373, 1420.
 Buzzetta, L. 3508.
 Bychukowski, O.E. 5227.
 Byrd, A.T. 3835, 6246.
 Bull, M.A. 8940.
 Bulla, L.A. Jr. 7471.
 Bullard, R.W. 2928.
 Bullerman, L.B. 284.
 Bullard, G. 5197.
 Bulough, D.A. 5.
 Bulman, J.D. 5086.
 Bulut, F. 7932.
 Bulycheva, N.P. 6057.
 Bumbiers, M. 386.
 Bunce, N.J. 3741.
 Bunch, A.W. 1043.
 Bunde, D.R. 2821.
 Bundy, D.A.P. 8968.
 Bungay, H.R. 7548, 8445.
 Bungay, M.L. 7548.
 Bunni, N.H. 6040.
 Burakaeva, D.D. 2590.
 Burage, D. 5398.
 Burck, D. 2737.
 Burchall, J.J. 5999.
 Burchall, R.T. 463.
 Burckhardt, E. 9221.
 Burdard, N.M. 4927.
 Burden, R.S. 8844.
 Burdenko, L.G. 99.
 Burdnyuk, I.P. 703, 9700.
 Burdett, I.D.J. 4331.
 Burdick, C.R. 5329.
 Burdon, J.J. 2972.
 Burdon, R.D. 3169.
 Burdo, C. 6263.
 Burg, W.R. 4886.
 Burge, W.D. 5976, 5978, 5984, 7945, 4886.
 Burgen, A.S.V. 2785.
 Burger, C.A. 797.
 Burger, D. 4910.
 Burger, D.W. 5347.
 Burgerion, A. 8353.
 Burges, H.D. 126, 991, 1007.
 Burgess, E.P. 1738.
 Burgess, L.W. 3204, 8560.
 Burgett, F.G. 1733.
 Burke, J. 6637, 4376.
 Burke, L.T. 6691.
 Burke, D.W. 5690.
 Burke, W.F. Jr. 9642.
 Burkhart-Maturin, R. 8089.
 Burlando, T. 1212.
 Burling, J.R. 1461.
 Burlington, D.B. 3361.
 Burns, A. 9162.
 Burns, R.G. 2344.
 Burny, A. 4474.
 Burr, T.J. 400, 2145, 4120, 5744.
 Burnil, H. 7515.
 Burnil, H. 9087.
 Burris, N. 2866.
 Burroughs, R. 5720, 5799.
 Burrows, M.R. 2090.
 Burrows, P.M. 1147.
 Burrus, P.B. 117499.
 Burstein, C. 4672.
 Burton, C.L. 6881.
 Burton, J.D. 9516.
 Burton, J.W. 9580.
 Burton, K.A. 7437.
 But, D.S. 1906.
 Butam, M. 2944.
 Busby, H.V.A. 8679.
 Busch, A.W. 6241.
 Busch, R.H. 3125.
 Busche, R.M. 7603.
 Busey, P. 7665.
 Bush, J.A. 983.
 Bush, L.J. 4869.
 Bush, L.P. 7499.
 Bush, S.R. 246.
 Bushby, H.V.A. 3234, 5959.
 Bushby, M.B. 6034.
 Bushnell, M. 4332.
 Bushnell, M.E. 7397.
 Bushuev, V.N. 1838, 7296.
 Buss, G.R. 9463.
 Bussereau, F. 6088.
 Busta, F.F. 193, 4810, 8497.
 Bustro, F. 1906.
 Butcher, D.N. 5761.
 Butler, I. 1586.
 Butler, J.H.A. 7001.
 Butler, J.K. 5243.
 Butler, J.R. 62.
 Butler, K.L. 8679.
 Butler, M. 2468.
 Campos, E. 2235.
 Canaday, C.H. 589.
 Canary, D.J. 9491.
 Canawati, H.N. 773.
 Cane, D.E. 6205.
 Canepari, P. 5249.
 Cannon, R.Q. 8684.
 Cannon, R.E. 9796.
 Canonic, P.G. 5212, 8797.
 Cantarelli, G. 1975.
 Canteros de Echenique, B.I. 456.
 Cantisani, A. 1378.
 Cantion, J.B. 2874.
 Cantone, F.A. 9451.
 Cantoni, C. 3824.
 Cantrell, M.A. 3127, 3578, 5936.
 Canut, H. 8170.
 Cao, S. 1778.
 Capila, J.A. 850.
 Capman, M.L. 8012, 8821.
 Capone, D.G. 2356, 8698.
 Capelletti, L. 6167.
 Cappelletti, L.M. 6157, 9732.
 Cappelletti, R.A. 3106, 5032.
 Capenberg, T.E. 7537.
 Capponi, R. 8583.
 Caprioli, A. 2952.
 Caputo, A.A. 677.
 Caputo, O. 2493.
 Caradus, J.R. 554.
 Carabonero, R. 7837.
 Cardenas, J. 5124.
 Cardoso, C.L. 7869.
 Cardoso, J.P. 2765.
 Cardoso, R.M.G. 2203.
 Carey, G.P. 1738.
 Carey, S.T. 6588.
 Carey, W.A. 544, 2322.
 Carini, M. 6187.
 Carlebach, R. 3517.
 Carlier, C. 3291, 6005.
 Carling, D.E. 587.
 Carling, S.F. 6195.
 Carlone, N.A. 8040, 8892, 9669.
 Carlson, F. 4612.
 Carlson, C.-G. H. 8939.
 Carlson, C.-G. 5107, 5119.
 Carlson, T.J. 6856, 9458.
 Carlson, J.R. 8636.
 Carlson, R.R. 4966.
 Carlton, B.C. 8044.
 Carman, G.M. 3682, 5485.
 Carmichael, L.E. 2599, 4767.
 Carmona, R. 9667.
 Carmona, S.F. 1228.
 Carnel, M. 7010.
 Caro, L. 1520.
 Caroff, M. 6704, 7632.
 Caroline, D.F. 4643.
 Carpenter, E.H. 4002.
 Carpenter, J.L. 2556.
 Carpenter, P. 9691.
 Carpenter, P.L. 1506.
 Carr, M.E. 4699.
 Carr, R.J. 2994.
 Carran, R.A. 609, 2371.
 Carraway, L. 7947.
 Carr, R. 9243.
 Carreira, E.L.C. 7919.
 Carret, G. 844, 861, 9886.
 Carrigan, L.L. 9342.
 Carroll, J.C. 9865.
 Carroll, R.B. 1372, 4934.
 Carroll, S.M. 6349.
 Carroll, V. 6581.
 Carroll, V.J. 5839.
 Carron, P.V. 1681.
 Carson, L.A. 7207.
 Carson, M. 1632.
 Carter, T.L.W. 3333.
 Carter, D.D. 81.
 Carter, D.J. 1734.
 Carter, G.A. 504.
 Carter, K. 952.
 Carter, M. 2968.
 Carter, M.R. 2359.
 Carter, M.V. 3900.
 Carica, R.J. 3243.
 Cartwright, B.O. 4535.
 Caruso, A. 4363.
 Carvalho, J.L.R. 5844.
 Casar, T.L.W. 6775.
 Casagelli, M.C. 8514.
 Casagrande, F. 2788.
 Casagrande, L.I.T. 5899.
 Casai, J. 6962.
 Casai, M. 4546, 8168.
 Casarmino, P.S. 809.
 Case, R. 72.
 Casella, A. 9341.
 Casey, G.P. 4527, 4528, 7516, 8408.
 Casida, L.E. Jr. 2353, 5090, 9569.
 Casini, I. 6103.
 Casini, M. 4324.
 Caskey, W. 2307.

- Casolari, A. 7084, 7093.
Casper, D.H. 3944, 4961, 4962, 9352.
Caspary, G. 4124, 4310.
Cassidy, G. 1079.
Cassagne, A. 7405.
Cassani, G. 2815.
Cassell, D. 1149.
Cassell, G.H. 9871.
Cassels, A.C. 7704, 7951, 8094.
Cassens, D.L. 5822, 9529.
Cassidy, P.J. 3436, 4409.
Castagnetti, P. 7084.
Castagnetti, F. 6667.
Castaldi, C.R. 809.
Castano, J.M. 8542.
Castelli, E. 381, 421.
Castellani, L. 9732.
Castellano, M.A. 5782.
Castiglioni, D. 596.
Castillo Ayala, A. 8487.
Castillo, F. 5124.
Castillo, F.J. 4410, 4658, 8307.
Castro, D. 5263.
Castle, T.M. 4419, 9791.
Castledine, P. 3629.
Castro, K.F. 3567.
Castro, P.A. 3567.
Castro Baltazar, M. 7190.
Castro Gomez, R.J.H. 7560.
Castro, C. 9989.
Castro, S.R.P. De 5606.
Casulli, F. 421.
Catelani, D. 8433.
Carpognani, G.L. 1934, 63.
Castroux, G. 8188.
Catsaras, M. 190.
Catska, V. 4141.
Cattaneo, E. 9398.
Cattaneo, O. 8040, 8892.
Cauwenbergh, G. 4274.
Cavallio, A.M. 6186.
Cavallio, G. 2558.
Cavallio, P.G. 2645.
Cavalloro, R. 9093.
Cavari, B. 5170.
Cavalli, M. 2209.
Cayley, G.R. 247, 4055, 5055, 5630.
Cayley, P.J. 3345.
Cecantini, B. 2343.
Cecarelli, B. 5347.
Cech, D. 9663.
Cech, N. 1165.
Celis, H. 9028.
Cellai, L. 12, 8861.
Cenni, F. 8964.
Cepones, M.J. 3106, 4052, 5032.
Cevenini, G. 1934.
Cerdas-Olmedo, E. 4738.
Cerkasauskas, R.F. 2380, 5821, 6826.
Cerna, J. 2929.
Cerniglia, C.E. 2391, 7019.
Cerra, A. 4163.
Cervini, R. 9862, 9864.
Cerrito, M.B. 5353.
Cervelli, S. 2343.
Cervone, F. 656, 6547.
Cervoni, T.D. 3254.
Ceska, M. 9294.
Ceskin, R. 9862, 9864.
Chabbert, Y.A. 1542, 4370, 5165.
Chadha, K.C. 7946.
Chaduneli, M. 2119.
Chaffotte, A.F. 941, 6485.
Chagraoui, A. 2816.
Chahal, D.S. 8418.
Chahal, S.S. 5712.
Chakrabarti, N.K. 1182.
Chakrabarti, P. 8868.
Chakrabarti, S. 8017.
Chakrabarty, A. 901.
Chakrabarty, A.K. 1059, 4750.
Chakrabarty, D.K. 3804.
Chakrabarty, R. 7562.
Chakrabarty, S. 563, 4223, 5920.
Chakraborty, T. 1844.
Chakravarti, B. 7145, 7419.
Chakravarti, B.P. 4064.
Chakravarty, D.K. 4516.
Chakravarty, P. 6915.
Chahal, D.S. 8878.
Chalamet, A. 612, 5960.
Chalfant, R.B. 9473.
Chalk, P.M. 2366, 4246, 9609, 9610.
Chaloupka, J. 7425.
Chamard, J. 5852.
Chamberlain, K. 5161, 8632.
Chambers, R.P. 9194.
Chambers, T.C. 1903.
Chamblee, D.S. 5128.
Chambon, P. 761.
Chambon, R. 7614.
Chamel, A. 6974.
Chamier, A.C. 2003.
Chamkrachang, W. 5770.
Chamovitz, B.N. 9826.
Champe, S.P. 33.
Champigny, M.-L. 8701.
Champlin, F.R. 7040.
Champsaur, H. 9846.
Chan, E.C.S. 8854.
Chan, M.K.-H. 3760.
Chan, S.I. 8036, 9148.
Chandan, R.C. 4796.
Chander, H. 2919, 4656, 6558.
Chander, R. 2934.
Chander, S. 814.
Chandler, F.W. 9845.
Chandler, H. 7320.
Chandler, M. 1520.
Chandler, W.A. 2151, 2248.
Chandra Mouli, G.V.P. 8507.
Chandra, A.K. 1850, 7375.
Chandra, A.L. 7562, 8017.
Chandra, H. 691, 6062.
Chandrasekaran, E.V. 4631.
Chandrasekhar, M. 6860.
Chandrasekharan Nair, M. 3096.
Chandrasekhar, A. 5770.
Chandrasekhar, S. 7790.
Chaney, W.R. 4205, 9503.
Chang, C.-C. 6390.
Chang, D. 4433.
Chang, D.S. 7126.
Chang, E. 8069.
Chang, F.C. 1673.
Chang, G.T. 9935.
Chang, G.Y. 5126.
Chang, H.-T. 1064, 1979.
Chang, H.L. 3883.
Chang, S.T. 1961.
Chanock, R.M. 3453.
Chant, S.R. 9397.
Chanyavak, V. 4448.
Chao, L. 6004.
Chao, T.A. 1776.
Chapin, K.C. 9952.
Chapman, P.J. 9470.
Chapman, R.A. 7499.
Chapman, S.W. 7978.
Chapparo-Serrano, M. 2032.
Chappel, R.J. 779, 4485.
Characklis, W.F. 1707.
Chararas, C. 3769.
Charles, E.S. 8773.
Charles, J.F. 1019.
Charles, M. 7261.
Charles, R.H.G. 7575.
Charley, R.C. 2857, 5505, 9245.
Chartrand, S.A. 5187.
Charudattan, R. 8183.
Charya, M.A.S. 3670, 3915.
Chase, A.R. 1261, 1268, 1619.
Chase, S.T. 1274, 2192, 5747, 9447, 9486.
Chase, D.L. 5954.
Chasseur-Libotte, M.L. 5627.
Chassy, B.M. 2774, 6414, 6419.
Chastagnier, M. 7284, 7286, 7866.
Chatel, D.L. 1498, 9952.
Chater, K.F. 7310.
Chatterjee, A. 1810.
Chatterjee, D.K. 1059, 4750.
Chatterjee, G.C. 5013, 6018, 7927.
Chatterjee, M. 7284, 7286, 7866.
Chatterjee, S. 2560, 6161, 6388.
Chatterjee, S.K. 168.
Chatterjee, S.N. 1560.
Chatterjee, S.P. 4569, 6388, 7284, 7286, 7866.
Chattopadhyay, B. 2526, 3413, 4344.
Chattopadhyay, S.K. 4105.
Chau, C.F. 8564.
Chau, P.Y. 756, 7132, 7985, 8807.
Chaudhary, K. 7331.
Chaudhary, K.C.B. 1272, 1280.
Chaudhary, A. 8122.
Chaudhuri, T. 7057.
Chaudhuri, T. 1570.
Chaudhury, A.K. 5009.
Chaudhury, V.B. 4123.
Chaurasia, M.R. 3153.
Chaurasia, P. 6498.
Chavarri, F.J. 8470.
Chavdarov, I. 7223.
Chave, E. 4672.
Chawla, J.C. 6040.
Che Man, Y. 262.
Cheah, L.H. 2276.
Chechkin, T. 7904.
Checko, P. 2040.
Cheema, S.S. 7764.
Chef, D.G. 4040.
Chelakula, L.N. 7393.
Chelasia, C.A. 8781.
Chelkowski, J. 2063, 8510.
Chen, A.K. 3327.
Chen, C.-C. 4952.
Chen, C.-M. 6390.
Chen, C.Y. 4433.
Chen, C.R. 8157.
Chen, H.Y. 2552, 7982.
Chen, J.-S. 7865.
Chen, J.H. 4809, 6685.
Chen, J.J. 8095.
Chen, J.S. 2845.
Chen, L. 343.
Chen, M. 5289.
Chen, P.M. 1211.
Chen, S.L. 3811.
Chen, T.S. 3821.
Chen, W. 6811.
Chen, X.D. 6317.
Chen, Y. 7363, 8342.
Chen, Z.-X. 8342.
Cheng, T.C. 1521, 1996.
Chendrynan, K. 9620.
Chendricks, A.C. 2900.
Cheng, C.N. 7832.
Cheng, H.H. 6967.
Cheng, S.-C. 1921.
Cheng, T.C. 1521, 1996.
Cheng, Y.-C. 1741, 6078, 7104, 7111, 9688, 9689.
Chenoweth, C.M. 1767.
Cheney, P.C. 1455.
Chenopik, S.M. 9500.
Chenou, J. 7052.
Cherednikova, T.V. 7332.
Cheremisinoff, P.N. 10000.
Cheri, Z. 4375.
Cherian, M.T. 4016.
Cheriyann, U.O. 1572.
Cherkasova, G. 8870, 8871.
Cherkassky, R.S. 8804.
Chermann, J.C. 2658.
Chermensky, D.N. 8444.
Chermomordik, A.B. 6057, 6228, 6338.
Chernyagina, T.B. 1929.
Chernyavskaya, M.A. 5184.
Chernysheva, D.P. 7870.
Chernyshev, A.I. 780.
Cherry, J.P. 3802.
Cherry, W.B. 3475.
Chersi, A. 4614.
Cherubin, C.E. 2445, 6089, 7057.
Cheruvu, M. 207.
Cheshire, M.V. 1474.
Chessin, M. 3111.
Chester, B. 9912.
Chester, B.L. 6758.
Cheshtukhina, G.G. 4911, 8281.
Chet, I. 2336, 3812, 5587.
Chetani, S. 6968, 7265, 7628, 7768, 8159.
Chettanachit, D. 1162.
Cheung, Y.F. 3608.
Chevallier, D. 3527.
Chevat, G. 2207.
Cheung-Chin, N. 5770.
Cheyner, V. 3769.
Chhabra, H.K. 4992.
Chhabra, K.S. 5806.
Chiang, H.F. 9005.
Chiang, J.F. 8779.
Chiao, C.C. 814.
Chiara, L. 7681.
Chiari, A. 2472.
Chis, S. 9847.
Chibata, I. 118, 4494, 4580.
Chibata, J. 7344, 8203.
Chibata, J. 6472.
Chida, K. 6573.
Chidester, C.G. 3441.
Chiengkul, A. 5770.
Chiesa, S.C. 1694.
Chiko, A.W. 3002, 5105.
Chikwam, J.O. 2804.
Child, J.J. 3694.
Childs, E.A. 278.
Chilingarian, K.H. 7486, 8349.
Chin, M.-D. 7890.
Chin, G.A. 2972, 4208, 6950.
Chilton, G.R. 6581.
Chin, J. 211.
Chin, N.-N. 8849.
Ching, K.K. 5958.
Ching, T. 5958.
Chin, J.P. 7617.
Chippely, J.R. 3655.
Chippendale, G.R. 2404.
Chirife, J. 864, 2943, 3515, 7056, 8774.
Chiristo-Trejo, J.M. 7987.
Chishiro, M. 5509.
Chistakov, N.A. 3547.
Chistopherson, R.I. 5487.
Chistoulas, D.G. 1700.
Chitroglou-Lada, A. 2641.
Chiu, J. 179, 195.
Chiu, M.-N. 1759, 3355.
Chiu, R.-J. 4952.
Chiu, W. 3890.
Chladek, L. 6637.
Chlumsky, T. 2177.
Chmielewska, A. 3532.
Chmiglia, V.A. 2184.
Chmigl, E. 6839.
Cho, G.H. 8397.
Cho, J.H. 8592, 9384.
Cho, N.Y. 9075.
Chod, J. 2143, 2168, 2728.
Chohayeb, A.A. 6284.
Choi, C.Y. 6165, 8397.
Choi, S.Y. 7464.
Choi, Y.D. 8397.
Cholette, H. 8310.
Chomarar, M. 861.
Chong, J. 2136.
Chong, R. 109, 4696, 6564.
Chong, Y.S. 6502.
Choppin, P.W. 1744.
Chopra, A.K. 6558.
Chopra, V.L. 370, 468, 1161, 1348.
Chordi, A. 4685.
Chornopova, N.T. 5923.
Chotani, G. 4545.
Chou, C.K.S. 3169, 7786, 7787.
Chou, S.P. 5974.
Chou, T.C. 6543.
Chou, Y.J. 8979.
Choubey, N. 7718.
Choudhary, S.P. 9276.
Choudhury, I. 5013.
Choudhury, M.M. 5697.
Chow, A.W. 2535, 8863.
Chow, S.T. 2017.
Chowdhury, P.N. 3989.
Chowdhury, M.K.R. 8868.
Choy, Y.-M. 6577.
Chretien, M. 2955, 6722.
Christen, A.A. 1131, 3918.
Christensen, B.L. 634, 3287.
Christensen, C.M. 7738.
Christensen, F. 56.
Christensen, K.K. 6383.
Christensen, L.A. 9657.
Christensen, M.J. 350, 377, 554, 5692.
Christensen, N.W. 9361.
Christensen, P. 6383.
Christenson, J.G. 9715.
Christian, J.H.B. 3849.
Christian, R.R. 3484, 3498.
Christiansen, M.N. 4030.
Christie, P.J. 5156.
Christie, S.R. 3812, 5587.
Christner, A. 8003.
Christopher, F.M. 217, 231.
Christopher, W.L. 3455.
Christophersen, J. 95.
Chrissy, E. J. 3164.
Chu, C.-H. 1440, 7774.
Chu, B. 978.
Chu, C.K. 5213.
Chu, C.Y. 1107.
Chu, P.W.G. 415, 9450.
Chudner, V.Z. 7072.
Chuang, T.D. 5180.
Chukhrova, A.I. 7340.
Chulan, U. 1687.
Chulayan, J.C. 6729.
Chun, C. 1066.
Chun, M.W. 5213.
Chun, W.W.C. 6309.
Chung, C. 3679.
Chung, K.C. 3697.
Chung, O.K. 240.
Chung, S.K. 8846.
Chung, S.S. 4386, 4387, 9741.
Church, B.M. 5725.
Church, F.C. 61, 83.
Churkina, L.N. 8895.
Churnush, T.V. 726.
Chynoweth, G.P. 5311.
Ciadardini, G. 4434.
Cichowicz, D.J. 67.
Cichowicz, S.M. 4775, 4776.
Ciegler, A. 279, 2313, 2315, 5646, 7619.
Ciffo, T. 8404.
Cifuentes, B. 6, 7373.
Cigna, J.A. 1365.
Cigliero, G. 6509.
Cimarusti, C.M. 3375.
Cimburkova, E. 2744.
Cimmerman, A. 5469, 8054.
Cimino, F. 6509.
Cinotto, M. 3854.
Cingolia, A.M. 1712, 1721.
Cipragra, J. 336.
Cipriani, P. 8816.
Cinibelli Guimaraes, J. 7106.
Cinibelli-Guimaraes, J. 7948.
Cirovic, M. 1684.
Cisar, G. 365, 445.
Cisternas, R.E. 2362.
Citro, G. 4614.
Citron, D.M. 725.
Clutec, C. 6265, 6267.
Cluffetti, L.M. 7618.
Cluffi, M. 6186, 6187.
Civerolo, E.L. 5381, 5398.
Ciznar, I. 300, 3891.
Clackson, T.E. 7090.
Claessens, M. 6436, 6438.
Clark, L.E. 4949.
Clarholm, M. 552.
Clark, A.K. 7601.
Clark, A.M. 7458.
Clark, B.D. 1107.
Clark, B.F.C. 1836.
Clark, B.L. 6486.
Clark, A.F. 9739.
Clark, S.C. 5292.
Clark, D.C. 8995.
Clark, S.D. 212.
Clark, E.M. 9077.
Clark, G.E. 586.
Clark, J.A. 797.
Clark, R.L. 361.
Clark, S. 7638.
Clark, T.A. 109, 4696, 5654.
Clark, W.S. 4026.
Clarke, A.E. 3020.
Clarke, A.M. 4357, 6155.
Clarke, A.P. 7234.
Clarke, C.A. 1441.
Clarke, G.F. 7110.
Clarke, J.A. 9476.
Clarke, K.R. 9829.
Clarke, L.M. 9009.
Clarke, P.M. 7234.
Clarkson, M.J. 7087.
Claus, G. 5580, 8450.
Claus, R. 2781.
Clausen, E. 7549.
Claydon, N. 5593.
Claypool, T.A. 9236.
Clayton, T.J. 562.
Cleaton-Jones, P.E. 8077.
Cleeland, R. 9715.
Cleary, J.C.S. 3541.
Clement, D.L. 6297.
Clement, S.L. 9427.
Clements, H.M. 9763.
Clements, J.D. 291.
Clemmesen, J. 5544.
Clercq, E. De 6068.
Clerget, M. 1520.
Clerman, F.J. 10000.
Cles, J. 9923.
Clesien, L.S. 7548, 8445.
Cleveland, P.H. 3540.
Cleveland, T.E. 345, 5772.
Clevestrom, G. 7621.
Cleyet-Mare, J.C. 557.
Clifford, D.R. 6873, 7767.
Cline, G.R. 9558.
Cline, M.N. 5745, 6869.
Cline, S. 3029.
Cline, S.P. 516.
Clothiaux, E.J. 9706.
Clobert, J. 9756.
Cluett, H.K. 9555.
Cluss, R.G. 8142.
Clyde, W.A., Jr. 9170.
Coakley, S.M. 2825.
Coates, D. 2676, 5400.
Cobb, F.W. Jr. 541, 1451, 4168, 5082, 9518.
Coburn, R.A. 1585.
Cockbain, A.J. 7664.
Cocker, F.M. 7951, 8094.
Cocuzza, G. 4364.
Coddington, A. 8748.
Coe, M.J.S. 2634.
Coe, P.L. 5210.
Coerulescu, E. 9134.
Coetzee, J.C. 3846, 9407.
Coffey, T.A. 1342.
Coffey, M.D. 9401.
Coggins, J.H. Jr. 3474.
Coggins, J.R. 4668, 7386.
Cognhill, D.M. 191.
Cognhill, D. 4814.
Cohen, E. 1419.
Cohen, H.J. 6354.
Cohen, H.J. 8747.
Cohen, J.R. 8184.
Cohen, J. 6292.
Cohen, L.R. 1603.
Cohen, M. 8565.
Cohen, M.L. 8472.
Cohen, M.S. 9637.
Cohen, N.C. 5236.
Cohen, S. 3273.
Cohen, S.N. 7513.
Cohen, T. 6067.
Cohen, Y. 5717.
Cohen, Y. 6798.
Cogniaux, H. 2595.
Coker, A.C. 1773.
Coker, C.J. 3571.
Colacino, J.M. 9687.

- Colbert, J. 4353.
Colcord, A.W. 4734.
Cold, M.H. 2001.
Colditz, I.G. 8122.
Cole, A. 1219, 2148.
Cole, A.L.J. 687, 688, 1851.
Cole, C.V. 614, 4218.
Cole, E. 2998.
Cole, E.C. 1277.
Cole, G.T. 4008.
Cole, H.Jr. 1172, 9362.
Cole, J.A. 73, 972, 4690.
Cole, M. 3411.
Cole, R.J. 2988, 3715 5664.
Cole, S. 8512.
Cole, W.E. 3167.
Cole, W.M. 2914, 7587.
Colella, C. 3497.
Coleman, D.C. 556, 614, 1485, 4218, 7810, 9539.
Coleman, G. 9883.
Colelli, M. 4333.
Coley-Smith, J.R. 1151, 4001.
Colhouh, J. 1228.
Colicchia, A. 5347.
Coligan, J.E. 7436.
Colin, P. 190.
Colindavillos, J. 4080.
Collieran, E. 8963.
Collier, A.M. 9870.
Collins-Thompson, D.L. 4771, 4835, 4878.
Collins, C.H. 2419.
Collins, E.B. 1040.
Collins, F.M. 3310.
Collins, G.B. 1340.
Collins, J.A. 256.
Collins, J.K. 5160, 9941.
Collins, J.L. 262.
Collins, M.E.G. 2371.
Collins, M.T. 9933.
Collins, M.F. 245.
Collins, P. 9697.
Collinson, S.K. 3211.
Colman, G. 2634.
Colombo, A.L. 4398.
Colonna, A. 6509.
Colosimo, A. 4514.
Colville, J.M. 8206.
Colwell, R.R. 2622, 5431, 6258, 9948.
Combes, T. 3291.
Combs, W.S. Jr. 2956.
Comer, M.J. 8266.
Cometta, S. 1734, 2691.
Company, M. 7727.
Comstock, J.C. 1176, 5709.
Comtat, J. 1060.
Comtois, R. 1740.
Conde, J. 4738.
Condit, R.C. 8739.
Conforti, M. 9732.
Congradayova, S. 3834.
Conkerton, E.J. 5648.
Conlin, K.C. 5822.
Conner, R.L. 2253.
Conno, P.J. 7.
Conno, B.W. 1692.
Connor, E. 2511, 2546.
Conover, R.A. 5020.
Conrad, J.R. 5311.
Conrad, R. 5917.
Conrad, R.S. 2414, 7040.
Conroy, J.V. 2505.
Conroy, R.J. 5771.
Conroy, S.C. 2785, 6458.
Considine, P.J. 7432, 9153.
Constable, L. 1586.
Constantinides, A. 4545, 8404.
Conti, G. 2343.
Conti, G.K. 1288, 1374.
Conti, M. 9341, 9399.
Contu, A. 1712, 1721.
Converse, R.H. 2161.
Conway, J. 5815.
Conway, K.E. 254, 4175.
Conway, L. 969.
Conway, R.S. 8243.
Conway, W.S. 5798, 8599, 8602.
Cook, A.A. 398, 1309, 7696.
Cook, F.D. 7018.
Cook, G.A. 3673.
Cook, G.H. 7349.
Cook, P.W. 3866.
Cook, R.J. 2137, 2284, 3013, 3158, 4090.
Cooke, B.C. 4817.
Cooke, B.M. 3021, 6767.
Cooke, M.D. 9956.
Cooke, R.W.I. 1892.
Cooksey, D.A. 2417, 9472.
Coolbaugh, C. 2899.
Cooley, D.R. 591.
Cooley, R.O. 810.
Coombes, J.W. 8158.
Coombs, G.H. 7090.
Coombs, G.P. 6341.
Coombs, R.R.A. 1742.
Cooney, G.J. 969, 2877, 3086, 9754, 9755.
Cooney, J. 3577.
Cooney, J.J. 5143, 5145.
Cooney, M.H. 9637.
Cooper, A. 8447.
Cooper, A.B. 163.
Cooper, B.H. 1569, 3308.
Cooper, G.R. 1252.
Cooper, J.E. 4235.
Cooper, J.J. 3960.
Cooper, K. 7473.
Cooper, R. 6591, 7175.
Cooper, R.A. 6560.
Cooper, R.L. 7656.
Cooper, R.M. 6825.
Cooper, S. 7162.
Cooperman, B.S. 1775.
Copeland, T.D. 7297.
Coperman, G.J.F. 6953.
Copp, G.H. 8716.
Coppson, G.R. 6623.
Coratza, G. 5163.
Corazzini, S. 4623.
Corbacz, R. 496.
Corbel, M.J. 6372.
Corbett, D.F. 1563.
Corbett, R.J. 4680.
Corbin, J.B. 2276.
Corboz, L. 6285.
Corcoran, E.G. 9982.
Cordeil, G.A. 7485.
Cordero, N. 1868.
Cordonnier, M. 8412.
Corelli, F. 7082.
Cork, D.J. 2894, 4681.
Cork, M.S. 2777.
Cork, C.T. 3741.
Corman, A. 5960, 8132.
Cornejo, I. 6318.
Cornelissen, F. 5182.
Cornelius, P.L. 7499.
Cornell, C.P. 4760.
Cornet, M. 9835.
Cornish-Bowden, A. 73.
Cornish, A. 3424, 6211.
Cormu, A. 3081.
Corradini, C. 8480.
Corrado, M.L. 6089, 7057, 7929.
Correa Rodrigues, H.A. 6312.
Correa, C.N.M. 7919.
Correa, W.M. 7919.
Corrente, E. 3495.
Corry, J.E.L. 8186.
Corrini, D.L. 9083.
Cortay, J.C. 6094.
Cortesi, M.L. 3859.
Cortez, J. 5890.
Cosand, W. 1919.
Cosby, S.L. 6293.
Cosentino, C. 2374.
Cosgrove, G.P. 2634, 6981.
Cosgrove, R.F. 6175.
Cossier, P.J. 2614.
Costa, A. 9751.
Costa, C.L. 2098.
Costantino, P. 656.
Costas-Martinez, C. 5233.
Coste, M. 5904.
Costello, P.J. 2867.
Coster, D.J. 9676.
Costerton, J.W. 3492, 5316, 6264.
Costo, W.A. 10009.
Cotner, E.J. 4927.
Cotor, F. 7950.
Cottrell, H.V.T. 1438.
Cottrell, I.W. 9200.
Cottrell, W. 980.
Cotton, P.J. 9392.
Couch, T.L. 1021, 1806, 4713.
Couchoud, P. 4552.
Couchoud, P. 9975.
Coughlin, A. 5024.
Coughenour, M.B. 1484.
Coughlan, M.P. 31, 7432, 9153, 9240.
Coupis, A.G. 3524.
Coulouid, D. 861.
Coulman, G.A. 9228.
Coulson, C.J. 4401.
Coulter, F.T. 3377.
Counts, G.W. 2528.
Courcol, R.J. 3593.
Courtieu, A.-L. 6004.
Courtieu, A.L. 4386, 4387, 8837, 9741.
Courtney, M.L. 4953.
Courtney, R.J. 4312.
Courtois, B. 3589.
Courtois, H. 7784.
Courtois, J. 3589.
Cournival, P. 3291, 6005.
Couse, N.L. 845.
Cousin, C.M. 5350.
Cousin, M.A. 226, 805.
Cousineau, L. 1793.
Cousins, C.M. 2913.
Cousinmer, J.J. 5885.
Couto, L. 5814.
Coutts, R.H.A. 318, 413, 1232, 1315, 3113, 9460.
Couture, L. 506, 7670, 7675.
Couture, M. 6893.
Cove, J.H. 3589, 7064.
Covelli, H.R. 9556.
Cover, E.C. 460.
Covert, N.L. 7170.
Covey, R.P. 1211.
Cowe, I.A. 3634.
Coyette, J. 5249, 7135.
Coyne, D.L. 9385.
Coyler, D.T. 6795.
Coz, J. 6611, 6612.
Covens, R.M. 4480.
Cozzane, A.J. 6094.
Cozzone, P.J. 7395.
Crabb, T.A. 6640.
Craddock-Watson, J.E. 6294.
Craft, D.W. 7082.
Craig, E.W. 8542.
Craig, J. 3936, 2651.
Craig, J.P. 2951, 8516.
Cramer, A.L. 4536.
Cramer, W.N. 7945.
Cramer, R. 4382.
Crane, M.P. 1742.
Crane, C.L. 8269.
Cranham, J.E. 8356, 8357.
Crassaris, L. 7124, 7185.
Craw, G.F. 894.
Craven, N. 8819.
Craven, S.E. 187.
Crawford, D.L. 170, 2887, 2896, 4578, 9261.
Crawford, J.H. 6249.
Crawford, J. 7218.
Crawford, M.A. 1137.
Crawford, R.L. 2887, 7544.
Crawford, S.A. 6108, 9949.
Crawford, S.L. 3159.
Crees, J.B. 1835.
Creech, J. 5890.
Crees, R. 8684.
Creighton, D.J. 7368.
Cremar, A.W. 5195.
Cremar, A.W.F. 6202.
Crespi-Parellino, N. 4398.
Crespi, H. 2759.
Cress, M. 1759, 3355.
Cress, C.E. 1203.
Cresswell, K.J. 140.
Creusert, N. 5505.
Crill, J.P. 5699.
Criscanti, M.M. 4590.
Crisp, P. 6861.
Crist, D.K. 2112.
Crist, M.F. 692.
Crokaert, F. 2553, 8055, 7054, 7154.
Cromack, K.J. 527, 4211, 9513.
Cromell, W.H. 7980.
Cronan, J.E. 8218, 8246.
Crock, N.E. 1736.
Crosby, J. 1811, 6732.
CROSS, A. 6952.
CROSS, J.E. 9462.
CROSS, T. 4706.
Crossignani, R.M. 9747.
Crossley, K. 714.
Crosby, M.V. 8035.
Crossman, S.M. 9594.
Crouzet, M. 3274.
Crow, V.L. 94, 6421, 8463.
Crowe, F. 1460.
Crowe, F.J. 5786.
Croy, T.R. 8925.
Croizat, Y. 557.
Crump, D.H. 2848.
Crumpacker, C. 9685.
Crumpacker, E. 111.
Crush, P. de 2823.
Crush, J.R. 609, 2364, 2716, 3245, 6981.
Crute, I.R. 6820, 8587.
Crutzen, P.J. 604.
Chyz, S.J.Jr. 3889.
Csako, G. 6728.
Csendes, I. 9750.
Csenesi, A.J. 1400.
Csizsi, A.S. 2287, 4125.
Csuzs, S. 8238, 8264.
Cudat, W.D. 4471.
Cudek, D. 2820.
Cuchural, G.J. 5262.
Cue, A. 4411.
Cuevas, R. 207, 3382.
Cuffini, A.M. 8892, 9669.
Cuffini, M. 8040.
Cullin, D. 1187, 3945.
Cullmore, J.V. 5393, 6467, 6985.
Cullnane, J.C. 1635.
Cullis, P.M. 4596.
Cullman, W. 9140.
Cumming, M.A. 3890.
Cummings, M. 7929.
Cumming, M.C. 3417.
Cummins, C.S. 3657.
Cundliffe, E. 638, 1521.
Cundy, K.R. 8894.
Cunger, B.M. 6751.
Cunha Netto, S.J. 8485.
Cunha, R.G. 8053.
Cunliffe, W.J. 6529, 7312.
Cunningham, G.L. 5098.
Cunningham, J.C. 9213.
Cuperfino, P. 2098.
Cuykova, V. 7965.
Cuppers, H.G.A.M. 4455, 4458.
Curdova, E. 7321, 8004.
Curfman, B.L. 9939.
Curi, E.A. 1118.
Currow, S.R. 4344.
Curran, E.D. 9009.
Curran, W.V. 6137.
Currie, D. 3169.
Curtis, R.A. 3284.
Curtis, R.W. 766.
Curtis, W. 2517.
Custer, C.S. 2050.
Custer, M.C. 3329.
Cuthbertson, D.C. 3634.
Cutler, E.J. 2724.
Cutler, R.R. 7026.
Cutler, D.W. 8802.
Cwelonke, P. 4156.
Cynamon, M.H. 1615, 7141, 8845.
Cynamon, S.E. 6261.
Czaban, J. 1489.
Czarnocki, K. 8081.
Czerkawska, H. 9210.
Czerkowsky, C. 9510.
Czenwinski, A. 9780.
Czynwinski, E.W. 6534.
Czynczyk, A. 1357.
D'Agostino, G. 4034.
D'Ambrosio, E. 8093.
D'Aoust, J.-H. 233.
D'Aoust, J.Y. 1077.
D'Arca, S.U. 7100.
D'Arco, S.J. 1120.
D'Costa, J. 2391.
D'Elia, M. 6403.
D'Hauteville, H. 871.
D'Hondt, D.G. 2643.
D'Silva, C. 84, 6500.
D'Silva, C.J.S.J. 1856, 5504.
D'Souza, J. 3663.
D'Souza, S.F. 4601, 9668.
D'Souza, T.M. 4613.
Da Costa Castro, J.M. 6576.
Da Silva, A.F. 6245.
Da Silva, A.A. 5608.
Da Silveira Pinto, A. 7869.
Dabek, A.J. 1210, 7694.
Dabernat, H. 7318, 7873.
Dabernat, H.J. 6119.
Daculiyte, J. 4056.
Dadack, V. 8124.
Dadgarwal, K.R. 5965.
Dadgar, A.H. 2412, 9705.
Daemen, A.L.H. 4876.
Dafalla, G.A. 2199.
Daft, M.J. 2330, 2348, 5894.
Dafu, Y. 9053.
Dagardom, D.J. 3923.
Dagens, L. 6074.
Dagley, S. 1849, 6429.
Dagnogo, M. 6611, 6612.
Dahiya, S.B. 3137.
Dahlberg, K.R. 7.
Dahlien, G. 4490.
Dahn, C.N. 5122.
Dahmen, H. 4544.
Dahms, A.S. 4630, 6376, 6437, 6441.
Daikos, G.K. 5269.
Daily, O.P. 6262.
Danello, F.J. 1337, 5064.
Danchenko, V.V. 7380.
Dairaku, K. 3818.
Dakhnovsky, V.I. 2004.
Dai Bo, E. 8561.
Dale, R.L. 336, 4948, 4950, 5010.
Dale, R. 167.
Daley, G.M. 2412, 9705.
Daley, L.S. 8504.
Daligh, D.A. 9834.
Daihoff, A. 739.
Daietos, D. 2841.
Daietos, D.J. 2840, 4659.
Dales, T. 7592.
Dallmann, S.J. 535.
Dalmacio, S.C. 1366.
Dalmon, H. 6400.
Dalton, P.R. 9975.
Daly, C.G. 2457.
Daly, J.M. 288, 2072, 2953.
Dammann, K.E.Jr. 9468.
Darnas, D. 6128.
Darnato, J. 9933.
Darcberg, M. 7174, 8907.
Darmam, J. 5247.
Darmodaran, S. 9119.
Darnski, J.W. 4993.
Darnelleg, V.D. 4947, 6778.
Darn, M. 3409.
Danders, W. 2424.
Dang, J.K. 4116.
Dang, Y.-D. 4483.
Dangan, J.M. 1220.
Daniels, B.A. 5845.
Daniel, D. 7419.
Daniel, R.M. 4618.
Danieleiko, L.V. 6105.
Daniell, W.J. 2151, 2248.
Danielli, H.M.C. 8711.
Daniels, B.A. 5845.
Daniels, L. 4577.
Daniels, M.J. 387, 1226, 5840.
Danielson, J.W. 215, 1729, 4322.
Danielson, R.M. 1480, 5916.
Danielsson, D. 6048.
Danilowski, W. 1129, 977.
Danilenko, V.N. 1621, 8006.
Danilevsky, N.F. 2495.
Danilina, E.M. 3326.
Danilov, L.L. 8331.
Danilova, E.G. 973.
Danilova, T.A. 7573.
Danilova, T.I. 7340.
Daniluyk, N.I. 8163.
Danilyants, E.V. 1557.
Dankert, J. 1620, 5179.
Danmark, H. 8465.
Danneberger, T.K. 6010.
Dano, S.D. 7614.
Danon, T. 454.
Danson, S.K.A. 9611.
Danson, M.J. 4662, 7396.
Daoud, N.N. 7910.
Dard, J. 7478, 7479, 7480.
Darg, G. 4491.
Daramola, D.S. 8688.
Darbeeva, O.S. 8804.
Danas, V. 4317, 8769.
Darnisse, F. 5067, 7670.
Darnis, L.S. 7077.
Darrach, L.L. 1346, 3880.
Dart, P.J. 4250, 7015, 9591, 9612.
Dart, R.K. 162, 164.
Darveau, R.P. 8148.
Darvil, A.G. 8615.
Das Gupta, C. 6647.
Das Gupta, U. 4691.
Das, A. 6012, 6068, 7838.
Das, J. 1625.
Das, S. 1810.
Das, S.K. 1877, 7931.
Daschner, F. 800, 801.
Daschner, F.D. 1607, 3387.
DasGupta, B.R. 9300, 9301.
Dash, M.C. 1493, 7824.
Dashkev, W.V. 5841, 5847.
Dashora, L.S. 7077.
Dassy, B. 3895.
Date, R.A. 8679.
Datta, M. 2225.
Datta, R. 9216.
Dattolo, A.R. 4457.
Dau, M.E. 9442.
Daugulis, A.J. 9250.
Daum, R.S. 644.
Dauphin, G. 4411.
Dauphin, C. 129.
Davant, N. 6049.
Dave, J.M. 6655.
Dave, P. 6207, 9776.
Davey, G. 4305, 9192.
Davey, G.M. 5300.
Davey, G.R. 1082.
Davey, G.R. 1082.
Davey, R.A. 3777.
David, H.L. 3603.
David, L. 2597, 3447.

Author Index

- Davide, R.G. 1432.
Davidkova, E. 3803.
Davidson, L.C. 6795.
Davidson, E.W. 1022, 1035.
Davidson, J.N. 5156.
Davidson, M.S. 1497, 7006, 7011.
Davidson, M. 2089.
Davidson, S. 3386.
Davies, A. 6953.
Davies, A.M.C. 387, 1226.
Davies, B.I. 5155.
Davies, D.R. 1904.
Davies, F.S. 4192.
Davies, F.T., Jr. 583.
Davies, G.J. 6953.
Davies, J. 4582.
Davies, M.E. 7112.
Davies, M.J. 2469.
Davies, M. 8734.
Davies, R.W. 6264.
Davila, M. 4631.
Davis, B.D. 6091.
Davis, C.E. 1710, 5149.
Davis, C.L. 5367, 5486.
Davis, D.C. 3609.
Davis, D.D. 6819, 9520.
Davis, D.W. 9326.
Davis, E.C. 3471.
Davis, G.H.G. 5399.
Davis, G.S. 2459.
Davis, J.G. 2714, 4.
Davis, J.H. 4942.
Davis, J.M. 8530.
Davis, J.R. 1244, 9083, 9901.
Davis, K.A. 952.
Davis, M.J. 3009.
Davis, P.E. 1505.
Davis, R.A. 5204.
Davis, R.D. 3991, 6833.
Davis, R.E. 2441, 6987, 7856, 9388.
Davis, R.F. 5018.
Davis, R.H. 4536.
Davis, R.M. 4049, 5065.
Davis, T.L. 948.
Davoust, D. 5555.
Davrannov, K. 7354.
Davidian, M.A. 7533.
dova, M.A. 2260.
Deaton, W.R. 1340.
Deaux, J.-C. 3589.
Dickens, J.A. 7595.
Doke, N. 3098, 3144.
Dawe, D.L. 5385.
Dawes, E.A. 9129.
Dawra, R.K. 5408, 9176.
Dawson, G.W. 3108, 8632.
Dawson, J.O. 9511.
Dawson, P. 3982.
Dawson, P.J. 6640.
Dawson, S.G. 3331.
Dawson, W.O. 457, 5220.
Day, B.P.F. 4781.
Day, D.F. 937, 2805, 4735.
Day, P.J. 418.
Dayan, M.P. 1366.
Daykin, M.E. 3980.
Dayton, A.D. 6680.
Dayton, D.F. 7739.
Dazza, R.M. 6128.
Dazzi, M. 3787.
Dazzo, F.B. 1508, 3239, 4242.
De Arriaga, D. 1905.
De Barjac, H. 984.
De Beer, R. 2769.
De Benedotto, P.G. 2436.
De Boer, C. 1782.
De Boer, E. 3566.
De Boks, P.A. 4261.
De Bont, J.A.M. 3262.
De Bruyne, C.K. 6436, 6438.
De Buyer, D.R. 5362.
De Carvalho, A. 6202.
De Chateauboudeau, G.A. 913.
De Cleene, M. 362.
De Clercq, E. 5211, 5218, 6073, 9685.
De Cueninck, B.J. 8334.
De Felip, G. 2408.
De Giori, G.S. 2686, 9878.
De Gorostiza, E.F. 9234.
De Haan, H.H. 8147.
De Haan, J. 8358.
De Haard, H. 60.
De Hollander, J.A. 3658.
De Jesus, E.A. 6692, 6696, 6700, 8506.
De Jonckheere, J.F. 798.
De Jong, A. 9260.
De Jong, C.J. 6865.
De Jong, J. 1632.
De Jong, P.J. 9309.
De Jongh, C.A. 4281.
De Kam, M. 4173, 6919.
De Kartow, A. 9282.
De Keyser, H. 5178.
De la Maza, L.M. 9842, 9908, 9967.
De la Rosa, F.F. 7291.
De la Rosa, M. 9976.
De la Rubia, T. 3280.
De la Torre, F. 7984.
De Lacy, K.M. 4872.
De Laporte, A. 4671.
De Leon, R. 4432.
De Ley, J. 362, 419, 4708, 7469, 8386.
De Lindo, L. 434, 3107.
De Lisle, G.W. 2694.
De Lopez, G. 665.
De Man, J.C. 1791.
De Mello, J.V. 711.
De Menezes, T.J.B. 9225.
De Mooy, C.J. 6957.
De Paoli, A. 2815.
De Pedro, M.A. 2555.
De Repentigny, L. 9993.
De Rosa, T. 7612.
De Ruiz Holgado, A.A.P. 2686.
De Ruiz Holgado, A.P. 9878.
De Schepper, P.J. 2584.
De Serres, F. 8149.
De Silva, S.S.M. 3315.
De Smet, M. 8720.
De Smet, M.J. 9631.
De Souza Fonseca, L. 7869.
De Souza Furtado, M. 5340.
De Valdez, G.F. 2686, 9878.
De Valk, L. 4671.
De Vay, J.E. 2986.
De Vos, P. 4708, 7469, 8386.
De Vries, N.E. 9360.
De Vries, T. 4820.
De Waard, M.A. 4908, 7022.
De Wildt, P.P.Q. 1326.
De Wit, P.J.G.M. 3100.
De Wolf, A. 4635.
De Zoeten, G.A. 339, 3930.
De Zutter, L. 5404.
De-Polli, H. 8699.
De-S.C. 5922.
Deacon, W. 3956, 4550.
Dean, A.C.R. 7954.
Dean, D.H. 1107.
Dean, J.L. 470, 1154, 2139, 5001.
Dean, P.D.G. 4617.
Dean, R.B. 9999.
Deaton, J.C. 8280.
Deatlor, R. 6054.
Deelweg, H. 5502, 7532.
Delmas, C. 6119.
Delmas, J. 6899.
Delorenzini, C. 7850.
DeLorenzo, W.F. 9715.
Delpech, P. 3877.
Deluca, A.J. 7819.
DeLuca, A.J. 2313, 2315.
Delwiche, E.A. 8333.
Delwiche, P.A. 4943.
Deman, A.L. 1886, 4675, 5231, 6545.
Demery, M.J. 9912.
DeMarina, A.Jr. 6163.
DeMars, C.J. 1451.
Demchick, P.H. 4816.
DeMelfi, T.M. 8472.
Demnerova, K. 3570.
DeMoli, E. 2843.
DeMoody, C.J. 5109.
Demoulin, L. 2420.
Dempster, R.P. 4285.
Demsik, J.W. 2985, 3927.
Denac, M. 8057.
DeNirol, M.J. 3260.
Denier, F. 5412.
Denis, G.I. 7342.
Denson, R.F. 5962.
Densov, V.M. 35.
Denning, C.R. 3451.
Dennis, C. 3339, 8479.
Dennis, P. 851.
Dennis, S.M. 6880.
Dennison, C. 9158.
Denny, T.P. 3779.
Denoff, B.L.L. 4325.
Dent, V.E. 9765.
Dentini, C. 2439.
Dernis, S.M. 6880.
Dernys, G.A. 3381.
Deo, Y.M. 5261.
Deosthale, Y.G. 3863.
DePaola, A. 2629.
DePaoli, A.G. 3506.
DeParade, M. 39.
DePner, J. 3801.
Der Vartanian, D.V. 8262.
Derbentseva, N.A. 1584.
Derdelinckx, G. 2859.
Derdzinski, K. 8435.
Devniese, L.A. 560, 2398.
Devyatkina, O.E. 1774.
Devys, M. 675, 7444.
Dewar, A.M. 3934, 5725.
Dewedar, A. 8014.
Dewey, B.W. 4221.
Dewey, R.S. 3436.
Dewey, W.G. 4110, 4111.
DeWitt, C. 7112.
DeWitt, S. 2841.
DeWitt, S.K. 2840, 4659.
Dexheimer, J. 7825.
DeY, B.K. 3187, 3188, 3214, 4195, 4252, 5891.
Dey, B.P. 5425.
Dezserly, M. 3057, 3077.
Dhalwai, H.S. 5817.
Dhand, S.K. 7650.
Dhanvantari, B.N. 3963.
Dhar, S.C. 940.
Dhar, V. 2997.
Dhawale, M.R. 8452.
Dhawan, K. 5769.
Dhawan, S. 2222, 4005.
Dhawale, V.K. 853, 6149.
Dhillon, B.S. 2131.
Dhillon, G.S. 329, 1098.
Dhingra, O.D. 1428, 2380, 5821, 6826.
Dholakia, J.N. 104.
Dhulster, P. 4532.
Di Franco, A. 4027, 5780.
Di Lauro, F. 5651.
Di Lenna, P. 946, 9443.
Di Maggio, D. 4629.
Di Menna, M.E. 3955.
Di Paolantonio, C.L. 6303, 8119.
Diab, S. 410, 8575.
Dianese, J.C. 6818.
Dianis, S.D. 543.
Diano, M. 8616.
Diarra, B. 1642.
Diasio, R.B. 8790.
Diattoli, A.G. 3506.
Dick, W.L. 2707, 3586, 7074, 7076.
Dick, J.D. 9784.
Dick, M. 5085, 7706.
Dick, W. 9140.
Dicke, M. 8665.
Dickens, J. 2204.
Dickerson, A.G. 3917, 5707.
Dickgiesser, N. 6042.
Dickie, N. 9295.
Dickinson, C.H. 3141, 3142, 5931.
Dickinson, N.A. 7910.
Dickie, E. 8354.
Dickman, D. 3300, 6099.
Dickman, M.B. 6788, 8563.
Dickson, K.L. 8069.
Dickson, M.H. 1365.
DiCosmo, F. 5754.
Didel-Burmes, M. 5562.
Dieckman, E. 5247.
Diehl, J.A. 379.
Diekert, G. 2769.
Dienschamps, A.M. 1060, 3782, 5600.
Dienschamps, F. 2043, 6650.
Diencol, G. 7334.
Diencol, J. 1681.
Dishmukh, S.S. 7564.
Deshpande, A.D. 1038.
Deshpande, K.B. 7760, 7765.
Deshpande, V. 4584, 4740, 7335.
Desai, J.D. 3379, 4914, 6527, 8152.
Desai, J.D. 3379, 4914, 6527, 7459, 7492, 8152, 9156.
Desai, S.A. 2082, 2277.
Desamps, J. 6073.
Deschamps, A.M. 1060, 3782, 5600.
Deschamps, F. 2043, 6650.
Descoltes, G. 7334.
Descoltes, J. 1681.
Deshmukh, S.S. 7564.
Deshpande, A.D. 1038.
Deshpande, K.B. 7760, 7765.
Dierich, M.P. 4891.
Diery, T. 9764.
Dierz Enciso, M. 1660.
DiFerandino, G.T.Jr. 8472.
DiGeronimo, P.M. 6052.
Dighton, J. 5857.
Digoutte, J.P. 9835.
Digrales, A. 2707, 3586, 7074, 7076.
Dijkhuizen, J.P. 5719.
Dijkstra, A.C. 9021.
Dijkstra, A. 943.
Dikchyene, A.A. 7342.
Dikshit, A. 691, 6876, 7933.
Diky, L.L. 2601.
Dili, T.R. 2287.
Dillon, J.T. 4239.
Dilworth, M.J. 3241.
Dimat, G. 310.
Dimitriadis, E. 6657.
Dimov, R. 1997.
Dimond, J.B. 7488, 8350.
Dimroth, P. 1870, 7347.
Ding, S.-H. 289.
Dinolfo, E. 7946.
Dinsdale, R.C.W. 8746.
Dion, M. 1739.
Diop, M. 9835.
Diotte, M.P. 8139.
Diverso, J.R. 9899.
DiPiro, J.T. 6039.
Dirks, V.A. 3963.
Disler, E.N. 1946.
Dissanayake, S. 6328.
Distaphorn, S. 1162.
Ditgens, K. 5267.
Ditgen, C. 25, 27.
Divekar, P.V. 7990.
Diven, W. 754.
Divnagracia-Laysa, F. 1197.
Dixit, S.N. 494, 691, 4297.
Dobbert, 6876, 7934, 8605.
Dixon, C.S. 6932.
Dixon, D.M. 7938.
Dixon, P.A. 2003.
Dixon, R.K. 9888.
Dixon, S. 4275, 8881.
Djekpor, E.K. 396.
Djordjevic, M.A. 1509.
Dkhar, M.S. 6941.
Dlugonski, J. 3704.
Dmitrenko, G.N. 2013, 9257.
Dmitrenko, O.A. 686.
Dmitrienko, V.K. 6892.
Dmitriev, B.A. 3713, 4700.
Dmitrieva, S.V. 8005.
Dmitrieva, S.V. 684, 1608, 4375.
Dmitrieva, T.M. 9683.
Dmochowska-Godysz, J. 8435.
Do Carmo Lagrta, M.H. 7108.
Do, D.D. 9087.
Dobberku, H.-J. 3477, 5228.
Dobrescu, L. 3885.
Dobretsov, G.E. 1545.
Dobritsa, S.V. 580, 664.
Dobson, M.J. 2775, 6458.
Dobson, R. 2216.
Dobson, R.L. 3977, 4255, 4998.
Dodan, D.S. 9482.
Dodd, J. 6948.
Dodds, J.A. 2981, 9372, 9865.
Dodge, 9867.
Dogdson, K.S. 148.
Doe, P.E. 2045.
Doebereiner, J. 9600, 9602, 9609.
Doelle, H.W. 105, 959, 5567.
Doell, 6487, 6654, 7515, 7572, 8270.
Dolge, 9867.
Dolge, R.F. 8764.
Doern, G.V. 9910, 9952.
Dogra, R.C. 7002.
Doherty, M.A. 460.
Doi, M. 4555.
Doi, T. 7316, 9180.
Dolak, L.A. 4419, 9791.
Dolfing, J. 4748.
Dolizda, D.A. 8293.
Dolizda, J.A. 6482.
Dollard, M.A. 8117.
Dolmans, S. 892.
Dombrovsky, A.M. 1545.
Dominguez, C. 5230.
Dominguez, M. 9673.
Dommergues, Y. 4240.
Dommergues, Y.F. 4184, 8181.
Dommett, T.W. 9273.
Dommasse, R. 6069.
Domnas, A.J. 1816, 1965, 8162.
Domoto, M. 6705.
Domracheva, A.G. 6154.
Domrsch, K.H. 2339, 2340.
Donald, A. 6437, 6441.
Donald, D.G.M. 2304.
Donaldson, A.I. 6291.
Donaldson, J.M. 4140.
Donaldson, M.D. 9834.
Donaldson, T.L. 6635.
Donatelli, I. 8093.
Donati, M. 9862, 9864.
Dondo, G. 896.
Donk, R.A. 7546.
Donlon, J. 8392.
Donndelinger, C.R. 1769.
Donnelly, D.M.X. 6584, 6914.
Donnelly, D.E. 6745, 6866.
Dontowitz, L.G. 2539.
Donson, J. 6299.
Doolan, P.T. 5226.
Doores, S. 7565, 7599.
Doornik, A.W. 3973.
Doorisairan, N. 1534.
Dordevic, J. 1925.
Dore, J.C. 4366.
Dore, M. 5294.
Dorca, J. 8959.
Dorman, C.J. 654.
Dorman, D.E. 8212.
Dorner, H. 7990.
Dornberger, K. 4404.
Dornbusch, K. 736.
Dorner, J.W. 8503, 8512.
Dorobot, O. 8732, 8753.
Dorofeyeva, I.K. 9001.
Dorset, R. 5868.
Dorworth, C.E. 451.
Dos Santos, C.E. L.M. 9225.
Dos Santos, E.C. 8474.
Dose, K. 4891.

Author Index

- Etola, R. 7823, 8212, 9118.
 Ervin, J.L. 2841
 Erzen, M. 3614
 Erzikyan, A. 7573
 Esaki, N. 1872, 1890, 9127.
 Esau, V. 5215
 Esau, K. 4036
 Esber, H.J. 4285.
 Escaffre, H. 1020, 6609, 6610.
 Escalante-Semera, J.C. 3556.
 Escalante, G. 2307, 3218, 3219.
 Escalante, L. 40
 Eschenbruch, R. 140, 3752, 3754.
 Escoula, L. 273
 Eshtleiman, K.N. 6901.
 Eskarous, J.K. 7702.
 Eskenazi, S. 5227.
 Eskenazy, M. 1240, 7223.
 Eskes, A.B. 2661, 3962, 4976, 6784.
 Esler, G. 4201.
 Eslyn, W.E. 1468, 5882, 6934, 7792, 9529.
 Esmans, E. 6069.
 Espigares Garcia, M. 4278.
 Espinel-Ingroff, A. 8790.
 Espinosa, J. 1504.
 Espinosa, M.T. 40.
 Esposto, S. 6815.
 Esquerre-Tugay, M.-T. 3981.
 Essenberg, M. 417, 418, 460, 3129.
 Esser, K. 1046, 3749, 7263, 8806.
 Esser, P. 5544.
 Esteban, M. 2485.
 Esteban, R. 4685.
 Ester Bonfim, M. 7659.
 Estes, M.K. 4313.
 Esteve, I. 5388.
 Estevez, E. 8769.
 Ettingov, E.D. 6170, 6230, 8862.
 Ethier, G.V. 1771, 9869.
 Ethier, P. 4392, 7119.
 Eugster, A. 3643.
 Evanchok, W.T. 2759, 7436.
 Evans, C.S. 8422.
 Evans, D.A. 6004.
 Evans, D.R. 23.
 Evans, F.E. 7019.
 Evans, H.F. 1470.
 Evans, H.J. 3578, 5936, 6979, 7009.
 Evans, J. 6989.
 Evans, J.A. 2839.
 Evans, J.B. 6727.
 Evans, J. 7227.
 Evans, M.R. 1705, 2888.
 Evans, R.H., Jr. 6197.
 Evans, R.T. 3605, 8123, 8814.
 Evans, S.T. 7458.
 Evans, T.M. 6267, 9532.
 Evans, W.G. 9873.
 Evans, W.R. 2112.
 Evdokimov, Yu.M. 7971.
 Eveleigh, D.E. 6346.
 Everson, M.L. 1110.
 Everall, P.H. 5349.
 Everett, G.W. 2803.
 Everett, P.H. 1311.
 Everitt, P.H. 3312.
 Eversmeyer, M.G. 3932, 9499.
 Evgrafova, P.P. 1163.
 Evison, L.M. 5324.
 Evsenko, O.V. 9666.
 Evutkhova, L.N. 8724.
 Evutshenko, A.I. 3344.
 Edwards, B.F.P. 23.
 Weiss, N.F. 7959.
 Ewell, H.R. 7579.
 Exconde, O.R. 1197.
 Exner, M. 5344.
 Eyal, Z. 454, 3950, 8620.
 Eysde, E. Van den 6247.
 Eysse, H. 5576.
 Ez, E.V. 8072.
 Ezzi, A. 3318, 9171.
 Ezur, N. 1941.
 F. de Toledo, M.R. 6311.
 Fadi, A.A. 6701.
 Fabian, J. 4773.
 Fábregas, J. 9769, 9771.
 Fabri, I. 2909.
 Faccioli, G. 2155, 8583.
 Facklam, R.R. 5429.
 Facklam, T.J. 4759.
 Fadenba, L.E. 6176.
 Fader, R.C. 8092.
 Fades, P. 3620.
 Fæhrnrich, P. 8253.
 Fagan, S.G. 2190.
 Fagan, S.M. 1816, 8162.
 Fagerberg, D.J. 3289.
 Fahey, G.C., Jr. 4860.
 Fahey, J.W. 850.
 Fahey, T.J. 4139.
 Fahmy, A. 8793.
 Fahy, P.C. 3063.
 Faine, S. 3455.
 Fairstein, V. 3322, 4362, 7977, 7979, 9675.
 Fairbanks, B.C. 4218.
 Fairfull, E. 1308.
 Fairfull, E.M. 4020.
 Faipola, A.O. 3965, 5061, 7409.
 Faibo, V. 2952.
 Falcao de Moraes, J.O. 6638.
 Falcao, D.P. 6956.
 Falcone, E. 9864.
 Falcone, L.A. 998, 2656, 7504.
 Fales, W.H. 7884.
 Falk, B.W. 5017.
 Falk, M.C. 2770.
 Falkenberg, S. 9990.
 Falkner, F.R. 9904.
 Fall, R.R. 8234.
 Fallik, E. 6842.
 Fallon, R.D. 3209.
 Falloon, L.M. 9383.
 Falloon, P.C. 432, 9383.
 Falloon, R.E. 5847.
 Fan, F. 5381.
 Fan, L.T. 1056, 7540, 9154.
 Fan, M.-Y. 9475.
 Fanelli, C. 4629, 6701.
 Fannin, F.R. 3041.
 Fannin, K.F. 5311.
 Fano, H.T. 7109.
 Farady, L. 7745, 8604.
 Farag, R.S. 2922.
 Farah, Z. 6889.
 Farber, B. 6131.
 Farber, B.F. 674.
 Farchione, L.A. 6002.
 Fargette, D. 1158, 2107.
 Farghal, A.I. 2075.
 Farghaly, M.M. 8446.
 Farquay, J. 7816.
 Faries-Mukhayish, S. 7219.
 Farkas, G.K. 7741.
 Farley, L.B. 632.
 Farmer, T. 3411.
 Farooqi, M.A.R. 5109, 6957.
 Farquhar, M.G. 884.
 Farr, D.F. 4825.
 Farrah, S.R. 2613, 3469, 8979.
 Farrar, J.F. 3939, 6769.
 Farris, S.H. 3174.
 Farshy, C.E. 9818.
 Farver, T.B. 2892.
 Fasano, O. 1835.
 Fasching, C.E. 5233.
 Fashchuk, K.G. 703.
 Fass, R.J. 731, 4330, 8001, 9661.
 Fast, P.G. 3738.
 Fataeva, T.V. 9873.
 Fathkhurova, T.I. 3456.
 Fatkuln, F.A. 8663.
 Fatkulin, C.A. 4968.
 Fattah, F. 2990.
 Fauti, J.L. 6541.
 Fautsch, H. 2954, 9312.
 Fauquet, C. 2115.
 Faust, U. 7536.
 Faverio, M.S. 7207.
 Favet, J. 7965.
 Favetto, G. 3515.
 Fawcett, V.A. 4579.
 Fawcett, M.A. 1030.
 Fayram, S.L. 9842.
 Fazio, S.A. 5365.
 Fazly Bazaz, B.S. 6051, 7926.
 Featherstone, J.D.B. 812.
 Fedchenko, B.A. 1030.
 Federici, F. 1852, 6403, 7925.
 Federle, T.W. 1061, 2023, 3509.
 Fedi, D. 4154.
 Fedorak, P.M. 5597, 8717, 8719.
 Fedorenko, V.A. 1621.
 Fedorova-Gray, P.J. 9517, 9314.
 Fedorova, G.B. 1487, 1676, 5543, 7992.
 Fedotina, B.L. 2118.
 Fedotina, V.L. 2117.
 Fedotov, N.S. 1853.
 Fedotkin, A.A. 6537.
 Feeley, J.C. 9920.
 Feeney, J. 2785.
 Feher, G. 3651.
 Fehlhäber, H.W. 7990.
 Fehr, W.R. 9457.
 Fehrenbach, F.J. 6398.
 Fehrmann, H. 1150.
 Feichter, A. 5446.
 Fein, J.E. 2857, 3550, 9245.
 Feinberg, M. 3769.
 Feingold, D.S. 3307.
 Feinberg, H. 2819.
 Fejerskov, O. 8996.
 Fekete, F.A. 8090.
 Feldblum, R.L. 630.
 Feldman, L. 1511.
 Feldman, M. 5942, 5944.
 Feldman, W.E. 5259.
 Feldner, J. 8249.
 Feldstein, H. 8969, 9628.
 Felciano, A. 1221.
 Felix, C.C. 2628.
 Fell, H.W.K. 4234.
 Fell, J.T. 3459.
 Fell, J.W. 3623.
 Feller, C. 5133.
 Feltner, J.K. 4302.
 Felmingham, D. 5195, 6202.
 Feltham, R.K.A. 8091.
 Fern-Oradeko, B. 9660.
 Fend, Z. 3642.
 Fend, Z. 2794, 2795, 2929.
 Fendrich, G. 1887.
 Fendrick, J. 592.
 Feng, L.H. 7225.
 Fenn, P. 5074.
 Fennington, G. 974, 9179.
 Fenol, P. 2644.
 Fenton, D.M. 103.
 Ferenci, T. 6373.
 Ferenczy, L. 658.
 Feres Saad, M.H. 7128.
 Ferguson, J.D. 378.
 Ferguson, J.J. 2331.
 Ferguson, K.P. 5482.
 Ferguson, L.E. 7594.
 Feñi, Z. 1237.
 Fermor, T.R. 2923.
 Fernandes, P.B. 8894.
 Fernandez Escartin, E. 8467.
 Fernandez-Luna, J.L. 114.
 Fernandez, C. 6978.
 Fernandez, H. 4336.
 Fernandez, J.A. 6776.
 Fernandez, V.M. 5492.
 Fernando, J. 398.
 Fergus, J. 3591.
 Ferradini, C. 6540.
 Ferranti, A. 2472.
 Ferrara, A. 4354.
 Ferrarini, J.J. 5340.
 Ferree, D.C. 505.
 Ferreira Fonseca, M.E. 7106.
 Ferreira Morgado, A. 6261.
 Ferreira, H.G. 9246.
 Ferreira, M.C. 777.
 Ferreira, S.A. 1176.
 Ferreira, S.P. 3438, 3443, 3602.
 Ferrer, M. 8892.
 Ferretti, G.A. 811, 8771.
 Ferns, N.P. 6291.
 Ferns, R.S. 3408.
 Ferron, P. 3248.
 Fesenko, V.D. 7627.
 Fletcher, J.L. 8615.
 Fewsom, C.A. 8286.
 Fax, T. 1959.
 Fier, J. 3892.
 Fiebig, K. 3261.
 Fiechter, A. 1930, 2691, 2750.
 Fiechter, R. 5547, 5588, 5589, 6644, 8308, 8931.
 Fiedler, F. 957, 7403.
 Fiedler, J.M. 7591.
 Field, A.K. 7112.
 Field, H.J. 7874, 9652.
 Field, L. 7149.
 Field, M.R. 8823.
 Fields, H.A. 4470, 5367, 5486.
 Fields, M.L. 251.
 Fields, R.D. 9050.
 Fieldsteel, A.H. 1745.
 Fier, J. 5616.
 Fiestkos, J. 9056.
 Fiestas Ros de Ursinos, J.A. 5305.
 Filo, M.O. 5123.
 Fiegenschau, K.J. 8105.
 Fignoni, R.A. 7743, 9469.
 Fiermo, E.R., Jr. 2258.
 Figueiredo, M.B. 2203.
 Figueiredo, P. 2258, 2291.
 Figura, N. 5163.
 Fikhte, B.L. 1828, 8294.
 Filadelfo, F. 8816.
 Filburn, B.H. 9784.
 Filho, A.W.P.F. 2273.
 Filho, O.P. 2258.
 Filgarova, M. 2178.
 Filin, G.M. 546, 5075.
 Filippi, B. 89.
 Filippi, P. 2851.
 Filippov, V.A. 1659.
 Filonov, A.B. 9572, 9573.
 Filtnerberg, O. 3873.
 Fina, L.R. 1571.
 Finan, M. 7059.
 Finlay, R.H. 2846, 9027.
 Finnegold, S.M. 725, 2535, 4328, 5194, 5262.
 Fineran, B.A. 5790.
 Fineran, J.M. 9403.
 Fink, J.N. 8172.
 Finker, R.L. 696.
 Finkelman, M.A.J. 6571.
 Finkelstein, R.A. 4916, 7634.
 Finn, G.A. 4248.
 Finn, M.P. 9931.
 Finn, R.K. 2891, 5583.
 Finn, G. 2935, 4808.
 Finney, K.F. 240.
 Finno, M.L. 659.
 Finotti, E. 6701.
 Finstein, M.S. 7191.
 Finzi, G. 806, 5346.
 Fiorotto, A. 4137.
 Firast, S.A. 1901.
 Firewood, R.L. 900.
 Firestone, M.K. 7805, 9076.
 Firsov, L.M. 6459.
 First, M.W. 7214.
 Firshen-Eden, R. 3613.
 Fischer, G.W. 9938.
 Fischer, J. 5659.
 Fischer, S. 9613, 7388.
 Fischer, W. 9035.
 Fischl, A.S. 3682, 5485.
 Fish, N.M. 626, 5507.
 Fishbeck, K.A. 2374.
 Fischer, J.J. 4913.
 Fisher, B.M. 140.
 Fisher, J. 4633.
 Fisher, N.L. 4999, 5764.
 Fisher, P.J. 3777.
 Fisher, R.F. 5853.
 Fisher, R.H. 5578, 5579, 5983.
 Fisher, R.W. 9484.
 Fisher, S.M. 7167.
 Fisher, G. 6817, 8606.
 Fishman, S. 9378.
 Fishman, V.M. 7071.
 Fish, D.D. 5727, 5921.
 Fitzer, R.D. 6833.
 Fitzgerald, R.B. 9738.
 Fitzgerald, J.W. 5102, 6904.
 Fitzgerald, R.J. 3319.
 Flanagan, W. 3021, 6767.
 Flannagan, D. 7278.
 Flannors, J.P. 861, 7434.
 Flaudois, J.P. 844, 2963.
 Flashner, M. 1553.
 Flatscher, J. 4861.
 Flechter, A. 1794.
 Fleck, W.F. 3438, 3443, 3602.
 Flend, J. 1574.
 Flegel, T.W. 2470, 3795.
 Fleischman, R.W. 4285.
 Fleming, J. 9879.
 Fleming, R.A. 366, 3958.
 Fletcher, G. 2160.
 Fletcher, J. 5959, 6803, 9388.
 Fletcher, J.D. 9317.
 Fletcher, J.S. 8416.
 Fletcher, J.T. 314, 6824.
 Fletcher, L.R. 2481.
 Fletcher, R.D. 3327.
 Fletcher, R.H. 5847.
 Fleurette, J. 2963, 9957.
 Flewett, T.H. 1308, 1473.
 Flick, P.K. 54.
 Flier, M. 6629.
 Fliermans, C.B. 3475, 5221.
 Fliess, A. 7365.
 Fling, M.E. 1522, 5999.
 Flint, D.C. 291.
 Floersheim, G.L. 9280.
 Flood, J. 2999.
 Flor, P.Q. 3669, 8305.
 Flor, P.Q. 106.
 Flores, A. 8170.
 Flores, M.E. 8920.
 Florescu, P.D. 6267.
 Floss, H.G. 6590.
 Flossmann, K.D. 2819.
 Flossmann, D.J. 4379, 8793.
 Flower-Ellis, A. 4832.
 Flower, R.L.P. 9014.
 Flowers, H.M. 8442.
 Flowers, T.H. 7834.
 Floyd, C.M. 9967.
 Floyd, C.N. 4251.
 Fluickiger, E. 4832.
 Fluogler, E. 4832.
 Flyer, S.E. 8464.
 Fluygare, S. 8127.
 Foarde, K.K. 4913.
 Fobes, J.F. 6851.
 Fockina, O.S. 6229.
 Focht, D.D. 7858.
 Fock, R.R.E. 9740.
 Foda, M.S. 3888, 5559, 9607.
 Fodor, S. 3718.
 Fodor, T. 2454.
 Fodergold, S. 6583.
 Foerster, D. 8850, 9753.
 Foerster, I. 5911.
 Fogarty, W.M. 4657, 7431, 9168.
 Fogel, R. 6905.
 Foght, J.M. 8717.
 Foglio, M. 1611.
 Fokkema, N.J. 3147.
 Folanay, J.O. 1578.
 Foides, M. 3383.
 Folta, D. 9709.
 Fomenko, T.I. 1866.
 Fomenko, Yu.K. 760, 2701.
 Fomicheva, G.K. 1654, 5234, 5278.
 Fomina, I.P. 855, 780, 1647, 2394, 1407.
 Fond, O. 4747.
 Fong, C.K.Y. 7231.
 Fong, J.C. 7802.
 Fonseca, K. 5281.
 Fonseca, M.E.F. 7948.
 Fonseca, O.J.M. 8066.
 Fonseca, R. 3894.
 Fonseca, G. 3858.
 Fontana, A. 4210, 4638.
 Fontana, R. 5249.
 Fontes, C.F. 6311, 9299.
 Fontjine, P. 5250.
 Foo, S.K. 67.
 Foo, S. 6184.
 Foote, N. 4556.
 Fong, R.S. 868.
 Foott, W.H. 9349.
 Forberg, W. 3439.
 Forche, S. 8550.
 Ford, A.M. 3289.
 Ford, G.C. 960.
 Ford, J.M. 9975.
 Ford, R.H. 7222.
 Ford, T.E. 8145.
 Fordyce, A.M. 6440.
 Forer, L.B. 1209, 2142, 8595.
 Forgel, N. 2741.
 Forge, W.M. 1346.
 Form, S.B. 2962.
 Formisano, M. 7563.
 Fornaro, P. 6189.
 Forner, C. 6396.
 Forouhi, F. 8085.
 Forrer, H.R. 3368.
 Forrest, T. 8824.
 Forsberg, C.W. 8244.
 Forsberg, L.I. 5763.
 Forsgren, A. 7184.
 Forster, C.F. 8928, 9092, 9799.
 Forstreuter-Kuennen, M. 242.
 Forst, R. 1574.
 Fortier, B. 3531.
 Fortin, J.A. 5097, 5910, 5913, 6893, 6970, 7776, 9510, 9543, 9544.
 Fortlage, R.J. 3104, 5028.
 Fortnum, B.A. 2267, 3909, 9327.
 Forward, K.R. 9662.
 Fosberg, F.R. 4147.
 Foscova, A. 4752.
 Fossati, C.A. 1758.
 Fossum, K. 1109, 3886.
 Foster, R.H. 522.
 Foster, G.H. 6836.
 Foster, J. 1962.
 Foster, J.E. 9342.
 Foster, S.O. 9859.
 Foster, T.J. 654, 8735.
 Foster, V. 9926.
 Foster, W.H. 5283.
 Fothergill, L.A. 2775, 6458.
 Foucaud, B. 934, 4627.
 Foulstone, M. 5252.
 Fountain, M.W. 3611.
 Fout, G. 1484, 8656.
 Fout, G.S. 7103.
 Fox, A. 9877.
 Fox, B.S. 9175.
 Fox, D. 9152.
 Fox, J.J. 5213, 7096.
 Fox, K.R. 3424.
 Fox, R. 3402, 4831.
 Fox, P.F. 221, 4663, 5491.
 Foz, A. 745.
 Fradkin, A. 3625.
 Fradkova, T.A. 1654, 2520, 2594, 6104.
 Fralish, F.A. 9838.
 Frame, J. 6953.
 Franc, G.D. 1242.
 France, R.C. 9505.
 Franceschi, G. 1611, 2561, 4300, 5260.
 Francis, D. 9862.
 Francis, D.W. 8131, 8141.
 Francis, M. 1837.
 Francis, M.McD. 6394.
 Francis, M.A. 6137.
 Francken, A. 2466.
 Francis, R.I.B. 415, 4473, 9450.
 Franco, A.D. 3038.
 Franco, A.A. 4230.
 Franco, R.A. 4143.
 Frank, C. 6952, 7281.

- Frank, J. 2789.
Frank, J.A. 1512.
Frank, J.F. 4802.
Frank, P. 9.
Frank, Z.R. 1411.
Frankie-Rinker, D. 5483, 6396, 7309.
Frankenberger, W.T., Jr. 2338.
Frankland, J.C. 8187.
Franklin, A. 2504.
Franklin, D. 8581.
Franti, C.E. 7935.
Frantz, J.C. 9313.
Frantzen, K.A. 353.
Franz, J.M. 3742.
Franzblau, S.G. 8400.
Franzen, C. 2916.
Franzin, L. 4918.
Fraser, A.D.E. 5401.
Fraser, C.A.M. 2634.
Fraser, R.S.S. 4020, 6648.
Frata, C.A. 1396.
Frazier, L. 7009.
Frazier, N.W. 8531.
Freacani, V. 8433.
Fredenck, R.L. 2342.
Fredensken, R.A. 2122, 3936, 4071.
Fredrickson, A.G. 2673.
Freed, R.C. 1110.
Freed, R.D. 1187.
Freedman, D. 8064.
Frederick, P.K. 9729.
Freeman, A. 4537.
Freeman, J.P. 2391, 7019, 7687.
Freer, J.H. 6723.
Freer, S.N. 2872, 9226.
Fregonese, L.E. 2273.
Freiberg, L.A. 6199.
Freimer, E.H. 7041.
Freire, J.R.J. 3227.
Freisheim, J.H. 2801.
Friel, D. 3756.
Fremy, J.M. 3877.
Frick, D. 1058.
French, D.W. 1458, 2314, 4155, 7788.
French, E.R. 434, 2232, 3107.
French, M.L.V. 9013.
French, R.C. 1131.
French, W.J. 1221, 7684.
Frenkel, E.P. 8221.
Frenn, I.M. 2788.
Freundlich, L.F. 2509.
Frevet, J. 65.
Freyer, K. 5080.
Freyssoldt, C. 3580.
Fribourg, C.E. 3071.
Fric, F. 355.
Friebertshausen, G.E. 2134.
Fried, M. 9611.
Friedli, H.P. 4768.
Friedly, G. 9967.
Friedman-Kien, A.E. 7107.
Friedman, H. 712, 9937.
Friedman, M.H. 8737.
Friedman, R.H. 2429.
Friedman, R.M. 9690.
Friedmann, E.I. 9548.
Friedrich, C.G. 8314.
Friedrich, J. 8054.
Friedt, W. 5729.
Friend, B.A. 214, 7591.
Fries, N. 441.
Fris-Moeller, A. 5406.
Frisch-Niggemeyer, W. 1755.
Frisvad, J.C. 3873, 7269.
Fritig, B. 4039, 4080, 8098.
Fritsch, W. 7556.
Fritzsche, R. 8586.
Frxon, C. 5505.
Froehlich, D.A. 8310.
Froemmel, C. 3685.
Froese, M.H. 9366.
Frolow, V.N. 758.
Frolowa, V.I. 780, 1647, 1656, 1678, 6234, 6236, 7160.
Fromageot, P. 4599.
Fromentin, H. 899.
Fronsch, M. 6810.
Fromseier, F.I. 6862, 7750.
Frost, A.J. 8954.
Frost, G.M. 3860.
Frost, J.A. 4277, 4280.
Frostli, B. 4445.
Frostli, G. 8081.
Fry, J.T. 210.
Fry-Smith, D. 9014.
Fry, D.C. 9178.
Fry, C.J. 3562.
Fry, P.R. 6731.
Fry, W.E. 1407, 1408, 5819, 5953, 8621, 8622, 9381, 9382.
Fryday, A. 7937.
Frydman, B. 9205.
Frydman, R.B. 9206.
Fu, W.-Y. 823.
Fuccillo, D.A. 9857.
Fuchs, G. 7414.
Fuchs, P.C. 737, 2536, 7181.
Fuchs, Y. 2034.
Fuchs, Y. 5834.
Fudt-Ali, A.E. S.A. 5019.
Fuerstenau, D.W. 814.
Fuji, K. 8965.
Fuji-Kuriyama, Y. 6491.
Fuji, H. 7442, 8327.
Fuji, I. 38, 5493.
Fuji, K. 6489.
Fuji, S. 917.
Fuji, T. 3797, 8389, 8662.
Fujimaki, M. 1590.
Fujimori, T. 6845.
Fujimoto, Y. 7589.
Fujimura, H. 8786.
Fujimura, S. 3423.
Fujimura, T. 7521.
Fujinami, A. 4300.
Fujinuma, K. 277.
Fujiu, T. 7494.
Fujiu, T. 1846, 4443, 4444, 9139.
Fujio, R.S. 2625.
Fujio, T. 7186.
Fujisawa, K.-I. 8888.
Fujisawa, Y. 733.
Fujishiro, K. 1895.
Fujishita, A. 5877.
Fujita, H. 8759.
Fujita, K. 8297.
Fujita, M. 7199, 7200.
Fujita, N. 965, 9223.
Fujita, S.C. 4640.
Fujita, Y. 730.
Fujii, M. 2743.
Fujiwara, A. 1673.
Fujiwara, H. 5251, 5253.
Fukagawa, Y. 1649, 1650, 9712.
Fukal, I. 7322.
Fukami, H. 3011.
Fukusawa, M. 3398.
Fukasawa, T. 4655.
Fukuda, H. 1960.
Fukuda, R. 6217.
Fukuda, Y. 1960.
Fukuhara, H. 1526, 6223.
Fukuhara, K. 923, 7306.
Fukuhara, K.-I. 2735.
Fukuhara, Y. 8628.
Fukui, H. 673.
Fukui, S. 981, 3726, 4541, 4726, 5501, 6585.
Fukui, T. 57, 8073.
Fukumura, T. 3790.
Fukunaga, I. 232.
Fukuoka, S. 3787, 5994.
Fukuoka, Y. 735, 3385.
Fukushi, O. 1045.
Fukushima, H. 6223, 8025.
Fukushima, J. 1919, 1939.
Fukushima, K. 3445, 9777.
Fukushima, S. 6223, 8025.
Fulbright, D.W. 2233, 2234, 9353.
Fulco, A.J. 8322.
Fullord, R.J. 5350, 6673.
Fulvi, F. 8983.
Fulker, R.H. 8924.
Fulmer, G. 5803.
Fullerton, R.A. 399.
Fulton, J.P. 333, 6733.
Fulton, R.W. 394, 9449.
Fulvi, F. 8983.
Funaguma, T. 4625.
Fundora, H. 7604.
Funamoto, O. 3856, 6682.
Fung, D.Y.C. 183.
Fung, J.C. 9306.
Fung, T.S. 7832.
Fung, Y.C.D. 5646.
Funk, C.R. 4079, 4954.
Funk, D.T. 5874.
Funkhouser, J.D. 6536.
Furesz, J. 4429.
Furihata, K. 764, 765, 2578, 2827, 2828, 2829, 4424.
Furlan, V. 5910, 5913, 9543, 9544.
Furlong, C.E. 6375.
Furman, P.A. 3366.
Furr, P.M. 2397.
Furtado, G.L. 839.
Furuchi, A. 4515, 7127.
Furuchi, N. 3098.
Furukawa, K. 5298, 5299, 5433, 6377, 8429, 9994.
Furukawa, T. 3645, 3647.
Furumai, T. 6200, 6313.
Furusaki, A. 4724.
Furusawa, I. 325.
Furuse, K. 6269.
Furuya, A. 1847, 7494, 8776.
Furuya, K. 8455.
Furuyama, S. 3286.
Fuska, J. 4752, 6658.
Fuster, C. 745.
Fuwa, H. 5615.
Fuxench-Chiesa, Z. 3382.
Fyfe, W.S. 4257.
Fyson, A. 3231.
Gaard, G. 3930.
Gabal, M.A. 6705.
Gabelimi, N. 4564, 4692.
Gaber-Porek, V. 3773, 5562.
Gabel, A. 8326.
Gabel, D.W. 356, 925.
Gabrielson, R.L. 2216, 3977, 4255, 4998.
Gadebusch, H.H. 2455, 3324, 4409, 4426, 9672.
Gadgil, P.D. 5050.
Gadher, P. 4117.
Gadler, H. 8798.
Gadoury, D.M. 1224.
Gadow, A. 6494.
Gadzhiev, D.A. 3200.
Gaeber, S. 3851.
Gadig, K. 6805.
Gaerlan, P.F. 3451.
Gaerth, K. 3607.
Gaffar, A. 6041, 8989.
Gaffney, J.S. 6589.
Gadimovich, S.Ya. 3518.
Gadukova, T.I. 6178.
Galitis, V. 4136.
Galliard, C.M. 938.
Ganser, S. 8933.
Gada, A.V. 20.
Gala, S. 9165.
Galavdis, I.Yu. 7339.
Galabov, A.S. 9683, 9684.
Galal, O. 5465, 5632.
Galanos, C. 1779, 5536, 6567, 8332.
Galante, D. 8815.
Galas, E. 7593.
Galatino, O.A. 1487, 1492, 6108.
Galbraith, J.H. 9588.
Galeazzi, L. 9922.
Galegov, G.A. 1546, 7949, 9635.
Galich, I.P. 1917.
Galindo, J.J. 1134, 5050, 9325.
Galtier, S.J. 6880.
Gallagher, R.T. 3955.
Gallander, J.F. 3757, 3761, 5568.
Galli, E. 8433.
Galliani, C. 5260.
Gallinger, P.M. 969.
Gallito, D. 315, 3038, 5789.
Gallmann, P. 662.
Gallmann, V.P. 2020.
Gallo, D. 9932.
Gallotti, T. 3497.
Galloway, E.E. 261.
Galloway, K.S. 1572, 7099.
Galluzzi, V. 3497.
Galstain, A.Sh. 7822.
Galstain, A.W. 5053.
Galstayn, S.A. 3203.
Galton, D.M. 4798.
Galon, E. 8969, 9628.
Gaiun, M. 8989, 9628.
Galushko, N.A. 4215.
Galvelis, A. 4256.
Galvez, G. 5050, 5052, 9325.
Galzy, P. 2043, 3756, 3844.
Galt, 45513, 6495, 7606.
Gammage, S.K.T. 3315.
Gamaleya, N.F. 6076.
Gamber, R.B. 5641.
Games, J.E. 2393.
Gameson, A.L.H. 3481, 3482, 9813.
Gamez, R. 337.
Gams, W. 2218, 2709.
Gangar, Kh.G. 1998.
Gancardo, A.G. 3358.
Gangarczyk, J.J. 9059.
Gangopadhyay, A.K. 4315.
Gangopadhyay, P.K. 853.
Ganguli, N. 1843, 7990.
Ganguli, L.A. 4551.
Ganguli, M. 6691.
Gangoung, J.S. 6343.
Ganny, F. 4184, 5313.
Ganshukina, L.A. 297.
Ganshukina, L.A. 298.
Garcia, E. 2485.
Garagulya, A.D. 1645, 8895.
Garann, B.A. 6112.
Garasko, S.I. 9692.
Garau, J. 5230.
Garavito, R.M. 6380.
Garay Auban, E. 7914.
Garay, E. 3558.
Garbaye, J. 531, 6907, 8649.
Garber, E.D. 2736.
Garber, M.B. 1829, 2738, 4574.
Garber, R.H. 1266, 2225.
Garbutt, I.T. 9883.
Garces, E. 7397.
Garcia Agudo, E. 8971.
Garcia Buendia, A.J. 5305.
Garcia Caballero, J. 4469.
Garcia Rodriguez, J.A. 6021.
Garcia-Boudin, C. 1418.
Garcia-Cervigon, A. 8710.
Garcia-Hernandez, F. 8391.
Garcia-Hidalgo, F. 1234.
Garcia-Lobo, J.M. 8043.
Garcia-Moya, J.B. 740.
Garcia-Quintana, G. 8920.
Garcia-Rodriguez, J.A. 757, 1556, 2503.
Garcia-Sanchez, J.E. 757, 2503.
Garcia, C. 4713, 7482.
Garcia, G. 439.
Garcia, J. 7979.
Garcia, J.-L. 7197.
Garcia, J.A. 3720.
Garcia, M.L. 2402.
Garcia, M.P. 2393.
Garcia, P.G. 204.
Garcia, R. 4432.
Gardo, V.L. 4482.
Gardener, S. 624.
Gardner, A.E. 1508.
Gardner, D.E. 4990, 9410, 9870.
Gardner, J. 4487.
Gardner, P.S. 711, 2463.
Gardner, R.G. 5045.
Gardner, W.A. 5550.
Gardner, W.K. 582.
Garegg, P.J. 4073.
Garinkei, D.J. 7689.
Garg, C. 5168.
Garg, S.K. 1826, 3662, 6666.
Gargan, R.A. 4275.
Gargan, T.P. 119854.
Garger, S.J. 9865.
Garibaldi, A. 4098.
Garinshina, A.Z. 9800.
Garino, F.M. 1618.
Garland, C.D. 3514.
Garlaschi, C. 6090.
Garner, I. 1626, 1627.
Garner, M. 9448.
Garabrandt, L.E. 6830.
Garron, J. 5696.
Garrec, J.P. 6973.
Garren, K.H. 5664.
Garrett, H.E. 9508.
Garrett, L.A. 8118.
Garndo-Pentiera, A. 53.
Garono, J. 204.
Garrod, B. 4078.
Garrott, D.G. 3025.
Garrow, S.H. 8035.
Garunas, R. 2894.
Garuti, L. 2472.
Garver, M.H. 1710.
Garvi, H. 8973.
Garyaev, A.A. 758.
Garzena, C. 1225.
Garzson, S. 1750.
Gasikin, R.E. 4143.
Gasikin, R.C. 4243.
Gaspar, M.C. 2447.
Gasztanyi, M. 4270.
Gat-Edelbaum, O. 3136.
Gatenbeck, S. 5514.
Gates, C.E. 3123.
Gatesoupe, F.J. 7809.
Gathuru, E.M. 9555.
Gatti, M.S.V. 9289.
Gaucher, G.M. 5261, 6690.
Gaudin, C. 2890.
Gaudin, O.G. 9694.
Gauthier, R. 9208.
Gauthier, B. 1516, 5954.
Gaunt, R.E. 1138, 7671.
Gaur, A.C. 607, 7799.
Gau, D.T. 611.
Gauss-Mueller, V. 9812.
Gautam, S.P. 5738.
Gauthier, D. 3215.
Gauthier, M.J. 6048.
Gauvreau, D. 4428.
Gauvreau, T. 7122.
Gauze, G.F. 2588, 5543, 7992.
Gauvin, T.D. 737, 7181, 9745.
Gaven, B. 295, 296.
Gavriluk, L.A. 297.
Gavrilov, A.V. 18.
Gavrilova, I.A. 5411.
Gawasko, A.A. 2618, 2619.
Gawthrop, F. 3140.
Gay, J.L. 8541.
Gay, P.E. 1490.
Gay, R. 2660, 4726, 4747.
Gaya, H. 1795.
Gazza, G. 9032.
Gazza, I.S. 3088, 9397.
Gbewonyo, K. 9985.
Geahlan, A. 7614.
Gealt, M. 3735.
Gehalle, G.T. 5053.
Gebre-Egziabher, A. 220.
Gecan, J.S. 225.
Gedkie, J.M. 7436.
Geddes, D.A. 7210.
Gedebou, M. 2418, 2525, 3389, 5153, 8980.
Gedek, B. 4892.
Geenen, J. 2209.
Geeraerts, A.M. 8261, 9151.
Geerts, J. 6247.
Geesey, G.G. 8059.
Gegelo, F.V. 6183.
Gehrig, G. 4827.
Gehron, M.J. 4466.
Geiger, J.P. 5081.
Geigert, J. 2840, 2841, 4659.
Geiges, O. 4840.
Geilfus, F. 5080.
Geis, A. 2583.
Geldertloft, H. 4491.
Geldreich, E.E. 1713.
Gelinas, R. 4417.
Geilf, G. 4422.
Genco, R.J. 8814.
Gendle, P. 6873, 7767.
Gendloff, E.H. 6881.
Gendreau, M. 2955.
Generagova, T.G. 1867.
Geng, Z. 2968.
Genigeorgis, C.A. 2925, 3840.
Gennaro, A.L. 9559.
Genov, N. 89, 90.
Genter, C.F. 6841.
Gentile, P. 1975.
Gentry, L.O. 7027.
Gentzsch, H. 5991.
Gerg-Fries, B. 9105.
George, A.M. 7894.
George, B.A. 3289.
George, B.F. 1681.
George, F.M. 1618.
George, G.C. 1691.
George, H.A. 2845, 7865.
George, U.S. 2367.
George, W.L. 725.
Georges, A.M. 3454.
Georgiev, P. 1240.
Georgopadakkou, N. 7175.
Georgopadakkou, N.H. 3375.
Georgopoulos, A. 2437.
Gephart, J.F. 1598.
Gepner, G.L. 4590.
Gera, A. 3114, 3156.
Geraci, C. 9032.
Gerashimko, D.D. 6105.
Geratz, J.D. 4316.
Gerba, C.P. 796, 2654, 3479, 8096.
Gerber, A.U. 1624.
Gerber, M.A. 6735.
Gerber, N.M. 8337, 8377.
Gerchakov, S.M. 1772.
Gerday, C. 2788.
Gerding, D.N. 5233, 5338, 9940.
Gerencs, V.F. 8759.
Gerencs, R.C. 8759.
Gerlach, D. 7408, 8214.
Gerlach, E.H. 737, 2536.
Germershausen, J. 7112.
Germida, J.J. 5090.
Gerna, G. 9853.
Gerth, K. 1853, 3433, 4412, 8880.
Gervais, M. 4623.
Gesche, E. 2030, 4819.
Gesheva, V.I. 1947.
Gessler, C. 465, 2262.
Gesson, J.P. 8775.
Getko, E.E. 2354.
Getz, S. 2233, 2234.
Getz, W.M. 342.
Geuther, R. 2808.
Gezelius, L. 736.
Ghabrial, S.A. 1754, 3067, 8541.
Ghadge, G.D. 7335, 8313.
Ghaffar, A. 1513.
Ghai, J. 8678.
Ghai, O.P. 310.
Ghai, S.K. 8678.
Ghannoum, M.A. 7959.
Gharipour, M.M. 7540.
Ghattas, A.C. 8749.
Ghezzi, A. 7137.
Ghezzi, M.C. 8816.
Ghisalba, O. 1628.
Ghoshkar, D.R. 7567.
Ghoshkar, D.R. 3376, 9743.
Ghose, T.K. 9242, 9249.

Author Index

- Ghosh, A.K. 13.
Ghosh, B.B. 7597, 8195, 8491.
Ghosh, J. 441
Ghosh, P. 4705, 8635, 9242.
Ghosh, S. 1810, 4691.
Ghosh, S.K. 5777
Ghoshal, S. 7845.
Ghumra, M.F. 9333.
Ghuyens, J.M. 2788.
Ghyseels, G. 5627.
Gialdini Grassi, G. 9723.
Giallo, J. 2890.
Giamarellou, H. 5269.
Giammancano, G. 871.
Giammarini, F. 5341.
Giantagnia, T. 5558.
Giamnazzi-Pearson, V. 7825, 9560.
Giamnazzi, S. 1334, 2156, 3081, 7825.
Gianetti, B.-M. 6083.
Giauffret, A. 2651.
Gibbons, R.W. 4083, 7015, 9475.
Gibbons, W.A. 7618.
Gibbons, W.R. 134.
Gibbs, A. 5696.
Gibbs, J.N. 6920.
Gibbs, J.N. 6206, 4479.
Gibson, A.A. 3057, 4790.
Gibson, D.H. 9738.
Gibson, D.M. 1371.
Gibson, D.T. 3263, 4521, 5144, 7385.
Gibson, G.L. 2634.
Gibson, P.B. 1147.
Gibson, R. 3831.
Gibson, R.W. 459, 467, 3108.
Giec, A. 8471.
Gielink, A.J. 9379.
Giesecke, D. 3851.
Giffhorn, F. 21, 2796, 7415.
Gij, J. 8032.
Gij, J.A. 8032.
Gilbert, G.L. 9851.
Gilbert, J. 6687.
Gilbert, J.P. 7595, 8750, 8765.
Gilbert, P. 2632, 3459, 7063.
Gilbert, R. 9057.
Gilbert, R.J. 2634.
Gilbertson, J.R. 683.
Gilbertson, R.L. 9414.
Giliboa-Garber, N. 6378.
Gill, C.D. 1141, 1171, 6860.
Gill, F.M.C. 9869.
Gillchirst, M.J.R. 5270.
Gildemeister, H. 5224.
Gildow, F.E. 3003, 6749, 8553.
Giles, J. 8579.
Gill, C.E. 7572, 9575.
Gill, C.O. 181, 1090, 2029, 7610.
Gill, H.K. 5221.
Gill, K.S. 1159, 5708, 5726, 5807, 6350.
Gill, R.S. 6897.
Gillan, T.J. 5595.
Gillaspie, A.G. Jr. 3009, 5001.
Gille, Y. 9886.
Gilliland, H.E., Jr. 632, 663, 2414, 7040.
Gilliland, P. 886.
Gilles, A.M. 4636.
Gillespie, J. 8460, 8462.
Gillespie, D. 7742.
Gillespie, F.L. 1359.
Gillespie, T.E. 3371.
Gillet, J.M. 5642.
Gilletto, W.B. 815.
Gilligan, C.A. 2110, 3949.
Gilligan, P.H. 2080, 7048.
Gilliland, M.R. 4824.
Gilliland, S.E. 7059, 7581, 8146.
Gillmore, A. 108.
Gilmour, C.M. 4237.
Gipratich, F.D. 1406, 4120, 5152.
Gimenes-Fernandes, N. 8626.
Gimenez Gimenez, G. 7914.
Ginalska, G. 5510.
Ginevskaya, V.A. 9684.
Ginsberg, R.E. 364, 1200.
Gintatiliu, I.M. 9962.
Ginn, R.E. 721.
Ginzburg, T.S. 1612.
Ginzburg, V.P. 3266.
Gioia, B. 2561, 6594.
Gioia, L. 8031.
Giordano, R. 8816.
Giori, P. 2478, 6875.
Giovannetti, G. 4210.
Giovannetti, M. 6975.
Giovanninetti, G. 2472.
Giotto, E. 6133.
Girard, J.M. 5613.
Girardian, F. 5297.
Giraud, J. 557.
Giri, S. 7114.
Gissmondo, M.R. 4340, 8810, 9721.
Gisselsson, H. 6282.
Gittalis, R.D. 4944, 5049, 6310, 9320, 9471.
Giugliano, L.G. 8711.
Giulietti, A. 9115.
Giulietti, A.M. 7823.
Giunchedi, L. 363.
Giunta, A. 9747.
Giunta, S. 9922.
Givental, N.I. 3388, 7966, 7968, 8804.
Givord, L. 1235.
Gjaerum, H.R. 9365.
Gladilin, K.L. 8256.
Gladikh, E.G. 2585, 6227, 6232.
Gladus, M.A. 3456.
Glaeser, H. 186, 2650.
Glaeser, R.M. 6393.
Glander, H.-J. 1591.
Glanzer, M. 2877.
Glasgow, L.A. 9806.
Glass, R.E. 4661.
Glasser, J.E. 4272.
Glatman, L.J. 7034.
Glauser, M.P. 8731.
Glabbe, D.A. 1299.
Glazacheva, L.E. 628.
Glaze, N.C. 9473.
Glazov, A.A. 28, 1898, 7339, 7342.
Glenn, D.M. 8355, 8357.
Glenn, D.R. 5437.
Glenz, R.H. 6646.
Glew, R.H. 7125, 9710.
Gleyzer, R. 6899.
Gleyzer, A. 3396.
Glezer, G.A. 1557.
Glien, G. 3972.
Glinzi, S. 4304.
Gisan, G.L. 634, 3287.
Gloguen, J.C. 2021.
Globe, A.J. 9811.
Glogowski, W. 2546.
Glogobitz, F. 4264.
Gloster, J. 6291.
Gluick, J.A. 5297.
Gloguzynski, Y. 7154.
Glyn, A.J. 1795, 1796.
Gnan, S.O. 9288.
Gnanamanickam, S.S. 2990.
Gobina, S.M. 5047.
Gocio, M.J. 5010.
Godbolt, S.S. 4601.
Goddard, C. 7775.
Goddchaux, W. III. 4509.
Goddon, B. 8061.
Godo, M. 221.
Godlewski, B. 2063.
Godes, E.M. 4450.
Goddredsen, S.E. 136.
Godyn, S.J. 8928.
Goebel, R.J. 5212.
Goeddel, D.V. 8046.
Goel, S.H. 888.
Goel, L. 6398.
Goel, K. 7111.
Goel, L.B. 447.
Goel, S.C. 7430, 7530.
Goering, R.V. 7155, 8738.
Goeritz, D.F. 4450.
Goessens, W.H.F. 5250.
Goetz, N. 5904.
Goewert, R. 2811.
Goffic, F.L. 8821.
Gofford, I.N. 7299.
Goh, K.M. 564.
Gohar, A.K.M.M. 8757.
Goheen, A.C. 4131, 8531.
Goheen, D.J. 5075.
Gohel, D.I. 84.
Goho, C. 7209.
Goh, C.J. 4510.
Golia, S. 7637.
Golar, V. 5869.
Gold, M.H. 6646.
Goldberg, A.L. 3679.
Goldberg, L.E. 7166.
Goldberg, M.E. 6485.
Goldblatt, S.A. 2696.
Golde, A. 3362.
Goldemann, G. 110.
Goldenberg, P.P. 5464.
Goldman, D.A. 5263.
Goldoni, J.S. 5607, 5608.
Goldschmidt, B.M. 8852.
Goldstein, B.P. 7183.
Goldstein, D. 4039.
Goldstein, E.J. 2445, 2507, 3420, 6089, 8737, 8836.
Goldstein, F.W. 3384, 6001.
Goldstein, J.I. 9190.
Golobowsky, J. 1969.
Gollak, P. 2063.
Golkota, K.G. 5138.
Golod, B.I. 2354.
Golobobov, A.D. 7868.
Golovina, T.O. 4693.
Golovina, V.S. 6026.
Golovinsky, E. 6056.
Golovko, E.A. 2346.
Golovlev, E.L. 7267, 7330, 8444.
Golovleva, L.A. 1998, 7392, 8444.
Golub, N.V. 2616.
Golubenko, I.A. 2768.
Golubeva, I.V. 6603.
Golubeva, L.S. 8862.
Goma, G. 2870, 4729.
Gombert, M.E. 2507, 3417.
Gombos, Z. 7741.
Gomes, H.R. 9253.
Gomez-Ortega, A.C. 1556, 2503.
Gomez-Ortiz, M. 4204.
Gomez, A. 8307.
Gomez, G. 2932.
Gomez, I.M. 5354.
Gomez, M. 1503.
Gomi, K. 6463.
Gomi, S. 1855, 4423, 6218, 7055.
Goncalves, J.A. 4658.
Gonchar, N.A. 234.
Goncharenko, E.N. 7025.
Goncharov, E.K. 971.
Gonde, P. 4744.
Gong, C.S. 8398, 9236.
Gong, C.S. 6572.
Gong, Z.-L. 783.
Gongadze, G.M. 7298.
Gonot Siuslov, K. 4973.
Gonsalves, D. 1292, 2195, 3135, 4089, 4978, 5054, 5778, 6855.
Gonjic, P. 869.
Gonzales Cambarces, C. 8729.
Gonzales, L. 6124.
Gonzalez M., S. 7683.
Gonzalez-Lopez, J. 3280.
Gonzalez, A.G. 4317, 8769.
Gonzalez, C. 9673.
Gonzalez, G. 114.
Gonzalez, J.B. 6556.
Gonzalez, J.R. 5029.
Goosh, G.T. 3316.
Gooda, K. 8839.
Goodchild, J. 3357.
Goode, M.J. 1233, 5043.
Goodey, A.R. 1989.
Goodfellow, M. 3193, 5427.
Gooding, A. 676, 4275, 8881.
Gooding, S.V. Jr. 1245, 5063.
Goodman, A.E. 1788.
Goodman, L.A. 5649.
Goodman, M. 1776.
Goodman, R.A. 3494.
Goodman, R.M. 2092, 6803, 6839.
Good, M. 419.
Goossens, A. 6074.
Goossens, H. 2595.
Gopal, P.K. 58.
Gopinathan, K.P. 856.
Gorbach, S.L. 685, 5262.
Gorbacheva, V.N. 5220.
Gorbet, D.W. 1409.
Gorcheneva, L.N. 6603.
Gordeev, V.K. 4481.
Gordon, A.S. 1772.
Gordon, D.T. 364, 1200, 3122, 4947, 4969, 4971.
Gordon, M.P. 2202, 7689, 9318.
Gordon, R.W. 6657.
Gordon, S. 4442.
Gorelik, L. 9845.
Goretz, R.C. 4767.
Gorham, J.R. 3360.
Gorkina, N.B. 2718.
Gorman, M. 8176, 8182, 9997.
Gorman, S.P. 5177.
Gorodetski, S.I. 6471.
Goroshnikov, S.B. 2650.
Gorshova, E.L. 7573.
Gorshkova, R.P. 6568, 9199.
Gorska-Poczkop, J. 9681.
Gorskaya, T.G. 7025.
Gorst-Allman, C.P. 6695.
Gosser, H.S. 8512.
Goswami, B.B. 3260.
Goswami, R. 8868.
Goswami, S.K. 767.
Goto, A. 6387, 6515, 7453, 8456.
Goto, H. 9017.
Goto, I. 5671.
Goto, M. 6575, 7715, 7716.
Goto, S. 5283.
Goto, T. 3875, 6188, 6736, 7177.
Gottif, S.P. 5392.
Gotho, O. 6491.
Gotoh, T. 918, 921, 2582.
Gottbeund, J. 9819.
Gottlieb, O.R. 7789.
Gottschalk, J. 9117.
Gottschalk, G. 962, 1037, 3261, 6431, 6442.
Gottvaldova, M. 3671.
Gottwald, T.R. 397, 5736.
Gough, K.H. 3043.
Gough, R.H. 2348.
Gough, S.B. 3475.
Gould, A.R. 3028.
Gould, R.W. 5167.
Gould, S.J. 6506.
Gould, S.J. 8886.
Goulet, J. 7117, 9006.
Gour, H.N. 4941.
Gour, L. 2679.
Gouri, F. 1442, 2031, 6906.
Gourlet, J.P. 6973, 6974.
Gove, G.W. 2808.
Govindakutty, M.P. 8567.
Gowland, G. 6529.
Goyal, A.K. 751.
Goyal, M.K. 7455, 7651.
Goyal, P. 3403.
Goyke, T. 8950.
Goznar, R.S. 3269.
Grabmueller, V. 1049.
Grabow, N.O. 9812.
Grace, L.J. 1440, 7774.
Grace, R. 952.
Grachev, V.E. 2970.
Gracheva, I.M. 7517.
Gracheva, I.M. 1808.
Gracia, C.P. Jr. 5304.
Graefe, U. 2797, 3443, 3602.
Graf, H. 8010.
Grafton, K.F. 354, 1164.
Graham, A.R. 4525.
Graham, D.V. 4313.
Graham, E.A. 7097.
Graham, J. 2941.
Graham, J.H. 1477, 4149, 4197.
Graham, P.H. 6963.
Graham, R.D. 6935.
Graham, R.L. 527.
Graham, T.E. 2764.
Granhart, W. 248.
Granger, J.M. 4263.
Grankovskaya, L.K. 1636.
Grancina, L.I. 1580, 2593.
Grakovsk, M. 1478.
Granada, G.A. 9898.
Granata, F. 9747.
Granata, G. 5752.
Granath, L.E. 817.
Granat, P.A. 3872.
Grand, C. 3097.
Grandin, M. 9654.
Grandy, J. 3603.
Grantors, K. 8143.
Grangeot-Keros, L. 828.
Granger, R.L. 5097.
Granch, G. 6074.
Granning, W. 7139, 7152.
Grankowski, N. 6408.
Granstroom, M. 886, 889, 9919.
Grann, W. 5041.
Gratcheva, V.N. 5220.
Gratum, E. 5680.
Gratum, P.E. 5655.
Gras, P.W. 2915.
Grassi, C. 10001.
Grassi, G.G. 4354.
Grassi, M. 7100.
Grassi, R. 9646.
Grasso, S. 5757.
Gratadoux, J.J. 7213.
Grattidge, R. 1257.
Gratton, C.A. 9945.
Graul, C.R. 1130, 1359, 4943.
Graul, F.H. 6633.
Grauer, R.B. 8360.
Gray, C.J. 1856, 5504.
Gray, D.J. 4166.
Gray, F.A. 2123, 3921, 4887, 9330.
Gray, G.J. 9662.
Gray, G.R. 9148.
Gray, H.B. Jr. 6507.
Gray, L.E. 5060, 5678, 6739.
Gray, N.F. 4214, 9550.
Gray, P.P. 4425, 6604, 8312, 9073, 9152.
Gray, R.H.J. 438.
Greaves, D.A. 6762.
Grebenshchikova, O.G. 24.
Greber, T.F. 8334.
Greco, O.T. 6098.
Greco, R.S. 5343.
Green, R. 4501.
Green, B.A. 7642.
Green, C.C. 452.
Green, C.D. 9333.
Green, D.C. 933, 3418.
Green, H.P. 3499.
Green, J. 8240.
Green, J.A. 1686.
Green, P. 9315.
Green, S. 179, 195, 2050.
Greenberg, E. 26.
Greenberg, E.P. 2052.
Greenberg, H.B. 1072, 1709, 1710.
Greenberg, T. 3300.
Greene, D.W. 591.
Greenfield, P.F. 141, 7515, 9087.
Greenhalgh, F.C. 6804.
Greenhalgh, G.N. 4181.
Greenhalgh, R. 8512.
Greenman, J. 7311.
Greenshields, R.N. 1809.
Greenwood, C. 4556.
Greenwood, D. 2430, 2545, 9038, 9752.
Greenwood, R.M. 7003.
Greenwood, Y. 7243.
Greer, F.C. Jr. 5019.
Greer, G.G. 7568.
Gregan, F. 7955.
Gregory, J.F. III. 2717, 4781.
Gregory, S.C. 5071.
Gregory, W.W. 9844.
Greil, E. 5268.
Grenick, M. 1347.
Gressler, J. 8442.
Greve, L. 2484.
Grewal, A.S. 5817, 6350.
Grey, T.C. 6866.
Griediere, A.M. 9886.
Gndnev, V.A. 6025.
Gndneva, L.I. 6025.
Gndneva, N.I. 6102.
Gries, M.H. 8063.
Griel, L.C. Jr. 8071.
Griebe, P.A. 7570, 9269, 9271.
Griffin, D.B. 261.
Griffin, D.E. 1127.
Griffin, G.F. 5949.
Griffin, G.J. 6962, 8623, 9571.
Griffin, C.E.F. 7368.
Griffith, J.K. 1536.
Griffith, J.P. 72.
Griffith, M.J. 8225.
Griffith, R.L. 9446.
Griffiths, C.L. 5614.
Griffiths, D.C. 3108.
Griffiths, D.T. 4385.
Griffiths, E. 6781.
Griffiths, J.B. 3954.
Griffiths, M.W. 8496.
Griffiths, N.M. 6689.
Griffiths, P.A. 3575.
Griffiths, W. 7965.
Grigorash, S.Yu. 4586.
Grigorenko, A.A. 6029.
Grigorenko, N.V. 9231.
Grigoreva, G.F. 705.
Grigoreva, V.M. 2548, 6102, 7071, 7970, 8724, 8855.
Grill, D. 7781.
Grill, L.K. 9865.
Grill, S.P. 1741.
Grimaldi, G. 6556.
Grinberg, N. 548, 2621, 6258.
Grinn, H. 3442, 4352, 4371, 6144, 7916, 8822.
Gnmmecke, H.-D. 8326.
Gnn, C.T. 8572.
Gnn, P. 8055.
Grnberg, T.A. 787.
Grnberg, I.I. 6025.
Grnberg, P.S. 7477.
Grnberg, T.A. 9189.
Grnchenko, B.I. 8013.
Grindley, N.D.F. 7424.
Grinnster, A.P. 6057.
Grinnster, A. 6817, 8606.
Gripplio, R. 4183.
Grisebach, H. 3907.
Grishagin, E.V. 9800.
Grisham, M.P. 9470.
Grishin, G.I. 1805.
Groebelar, N. 4217.
Grobler, S.R. 879.
Grodzka, K. 8081.
Groeger, D. 129, 1032, 3687, 5545.
Groener, A. 4710.
Groenewegen, D. 4455, 4458.
Groenewold, J. 1695.
Groesbeek, N.M. 8213.
Groesland, K. 5618.
Grogan, D.W. 8218.
Grogan, R.G. 1397, 1402, 9339, 9383, 9453.
Gronmann, U. 481.
Gronow, E. 8244.
Gromet-Eltan, Z. 8285.
Gromozova, E.N. 2616.
Gronowitz, J.S. 3363, 9848.
Groot, W.J. 4737, 9241.
Grootes-Reuvelcamp, G.A. 9951.
Grothwass, K.W.D. 2813.
Gropa, G. 9922.
Gross, D.C. 3062, 7307.
Gross, H.J. 8529.

- Gross, M. 9814.
Gross, P.A. 3451.
Gross, R.J. 1540, 7903, 7904.
Gross, S. 9224.
Gross, Z. 3554.
Grosset, J. 8813.
Grossgebauer, K. 3619.
Grossmann, E.D. 9262.
Grossmann, F. 693, 1401, 8319.
Grosstockle, S.C. 519.
Grosso, E. 1720.
Grot, J.V. 1160.
Grot, B.W.W. 3629.
Grove, G.G. 505, 3092, 5755.
Grove, J.F. 6593, 6661.
Grove, M.D. 1328, 7264.
Grove, T.S. 517.
Grover, R.K. 323, 490, 4116, 5168.
Groves, M.G. 9964.
Grubb, P.J. 1490.
Grubb, W.B. 6019.
Grubs, J. 8986.
Gruneberg, R.N. 2399, 5195, 6202.
Grueter, M.G. 960.
Grula, M. 5141.
Grundstroem, T. 86.
Grunewaldt-Stoecker, G. 1310, 3054.
Gruninger, R.P. 3401, 3444.
Grushina, V.A. 2587, 8019.
Grusin, I.V. 7941.
Gruzina, V.D. 6171.
Grzelak, D. 8459.
Grzybowski, J. 9780.
Guagliardi, L.E. 4303.
Guan, W.N. 9340.
Guadriola, J. 656.
Guarino-Rotman, D. 1579.
Guariguata, R. 3641.
Guarim, V.L. 8066.
Guarino, M. 6014.
Guarnen, M. 2478, 6875.
Guarzo, J. 3202.
Guay, D.R.P. 7168.
Gubina, M. 3614.
Gubis, V. 3613.
Gudauskas, R.T. 368, 1185, 3007, 3880.
Gudkov, A.T. 1838, 7298.
Guez, O.V. M. 558.
Guede, H. 3463.
Gueganian, G. 4133.
Guenther, C.E. 2591.
Guenther, H. 7281.
Guerin, M. 913.
Guerlesquin, F. 4552.
Guerra, L.H. 3659.
Guerrero, R. 5388.
Gueronil, L. 4650.
Guerzon, M.E. 3759.
Guevara, Y.G. 7696.
Gueye, M. 6991.
Guha, P. 3758.
Guidin, R. 7190.
Guillano, C. 7545.
Guilmet, F. 8113.
Guillet, P. 1020, 6609, 6610.
Guilliano, C. 9251.
Guinea, P.A.M. 5161.
Guinet, R. 8113, 9886.
Guinet, R.M.F. 9737.
Guiney, D.G., Jr. 5149.
Guiraud, J.P. 6495, 7606.
Guiscatre, H.G. 2393.
Guse, B. 4321.
Gustafsson, D. 3585.
Gutko, M.A. 7867.
Gulamova, N.Kh. 8279.
Gulevskaya, S.A. 8274.
Gulio, V.P. 3436.
Gulya, T.J. 1304.
Gumieniak, J. 9780.
Gump, D. 3701, 4404.
Gump, D.J. 4920.
Gump, R.J. 9833.
Gunsakar, P. 7908.
Gunsakera, S.A. 4180.
Gundlach, H. 9816.
Gurji, S. 8028.
Gurji, D. 9085.
Gunn, L.V. 3063.
Gunn, R.A. 1072.
Gunn, R.H. 4431.
Gunn, K. 7617.
Gunn, M. 7801.
Guro, H.C. 9016.
Guro, H.J. 823.
Guro, H.C. 825.
Guro, Y.-J. 824.
Gupta, A. 8306.
Gupta, A.A. 5186.
Gupta, D. 9689.
Gupta, D.K. 9682.
Gupta, J.S. 3390, 4048.
Gupta, K.K. 2557.
Gupta, M.D. 5705.
Gupta, M.L. 116.
Gupta, M.M. 5186.
Gupta, N. 1302.
Gupta, R.C. 2476.
Gupta, R.K. 4225.
Gupta, R.N. 3978.
Gupta, R.N. 3006, 8678.
Gupta, R.S. 3826.
Gupta, S.K. 216, 5708.
Gupta, S.L. 3346.
Gupta, S.P. 8044.
Gurevich, G.A. 2718.
Gurfel, D. 5947, 6306.
Gurgis, R.V. 5046.
Gurina, E.I. 7123.
Guritz, R.H.G. 2977.
Gurney, E.G. 829.
Gurney, T. Jr. 829.
Gurtovnik, A.I. 7236.
Gussien, E.J. 3961.
Gust, I.D. 3524.
Gust, L.W. 4208, 6950.
Gustafsson, T.L. 3490.
Gut, W. 820, 6289.
Guthertz, L.S. 210.
Guthrie, R. 716.
Guthrie, E.J. 1375.
Guthrie, W.D. 361.
Gutierrez, A.P. 2134.
Gutierrez, O. 6682.
Gutmanis, F. 8314.
Gutmann, L. 3384, 9644.
Gutnick, D. 7863.
Gutowick, J.A. 9296.
Gutter, Y. 1319.
Guttmann-Bass, N. 3538, 4476.
Guy, P. 3074.
Guyot, J.-P. 7197.
Guzev, V.S. 4224.
Guzhova, E.P. 99.
Guzman-Verduzco, L.M. 3894.
Guzman, M. 6004.
Gvozdyak, P.I. 9432.
Gvozdyak, P.I. 854, 2013.
Gvozdyak, R.J. 2682, 9900.
Gwak, S.H. 8317.
Gwaltney, J.M., Jr. 804.
Gwin, G.H. 4945.
Gyorgy, B. 2166.
Gyulavari, O. 7745, 8604.
Haag, G.L. 9238.
Haagensen, P. 7326.
Haashtela, K. 4244, 8660, 9597.
Haaker, H. 7420.
Haas, C.N. 9810.
Haas, J. 6948.
Haas, R. 9035.
Haabermehl, G.G. 2944.
Habib, H.M. 7702.
Halbison, A. 4610.
Hackerott, H.L. 6747.
Hackerot, M.L. 7311.
Hackett, T.J. 7432.
Hackman, B. 7972.
Hadar, Y. 5587, 5820, 7265, 7768, 9461.
Hadas, O. 5170.
Haddad, N.A. 1128.
Haddfield, S.G. 1796.
Hadidi, A. 3044.
Hadiel, G. 4201.
Haefeli, C. 631.
Haefliger, W. 1781.
Haegbloom, P. 1102.
Haeggstrom, L. 6583.
Haeggstrom, M.H. 7529.
Haenel, H. 7502.
Haeninen, P. 5154.
Haenseler, E. 4824.
Haefel, I. 3477.
Hafellner, J. 7781.
Hafez, A.H. 299.
Hafidi, B. 1237.
Haliz, S. 3583.
Hagberg, C.-E. 5216.
Hagedorn, C. 7847, 8144.
Hagedorn, D.J. 347, 1136, 1387, 9319, 9336.
Hageman, J.H. 7416.
Hageman, R.H. 606.
Hagenaars, A.M. 6300, 9293.
Hager, A. 7953.
Hagerman, A.E. 3015.
Haggar, D. 5245.
Hagler, W.M. 1086.
Hagler, W.M., Jr. 4899.
Haglund, S. 9526.
Hahn-Haegler, B. 137, 1737.
Hahn, J. 604.
Hahnel, G.B. 5167.
Haider, K. 159, 1476, 2335, 5599, 6967.
Hagler, C. 7473.
Hainke, H. 6296.
Haines, G.R. 7102.
Hainzelin, E. 5723.
Halt, G.N. 2292.
Halvaks, L. 4351, 5240, 7146.
Hakabayashi, T. 8242.
Hakenbeck, R. 912.
Hakohen, D. 6817.
Hakulinen, R. 4446.
Haladjian, J. 6546.
Halama, D. 4774.
Halasz, A. 926.
Halbrook, W.U. 5803.
Hald, B. 7623.
Halder, S. 6018, 7927.
Hale, C.N. 7652.
Hales, S.G. 148.
Halevy, B. 3528.
Halton-Mein, A. 2215.
Halitsky, P.M. 4079, 4954.
Hall, C.B. 2224, 9855.
Hall, D.H. 1264.
Hall, D.O. 4611.
Hall, H.K. 9997.
Hall, I. 4344.
Hall, I.R. 7273.
Hall, J.B. 5225.
Hall, M.J. 9989.
Hall, M.L.M. 2637.
Hall, R.A. 26, 1002.
Hall, R.J. 6824, 6944.
Hall, R.M. 117.
Hall, T. 1702.
Hallander, H.O. 736.
Hallas, G. 2740.
Hallas, E. 5288.
Hallas, R. 6198, 6199.
Halberg, R. 7179.
Hallenbeck, P.C. 19, 1833, 6607.
Hallier, I. 747, 3290, 9702.
Halliday, J. 1786.
Halls, N.A. 5226.
Hallstrom, J. 3718.
Halsal, D.M. 525, 1483.
Halmeier, T. 171, 5589, 8308.
Halwagy, R. 8673.
Ham, G.E. 5130, 6999.
Hama, T. 4648.
Hamada, M. 1658, 4423, 6152, 6218, 6220, 7449, 9778.
Hamamoto, T. 8028, 8029.
Hamana, T. 8582.
Hamann, J. 4393.
Hamano, K. 2140, 7552.
Hamaoaki, M. 6478, 6514.
Hamasaki, T. 6618, 8339.
Hamashima, M. 1568.
Hamaya, E. 4014.
Hambye, E.A. 9913, 9917.
Hamblenton, R. 3612.
Hambræus, A. 1731.
Hamby, P. 8320.
Hamelin, C. 1739.
Hames, B.D. 1831.
Hamid, A.H. 375, 382, 455.
Hamid, M.A. 452.
Hamida, S. 1404, 2286, 2379, 8707.
Hamid, R. 3377, 6212.
Hamilton-Miller, J.M.T. 676, 4275, 8881.
Hamilton, B.K. 460.
Hamilton, I.R. 4497.
Hamilton, P.B. 1086, 4888, 4899.
Hamilton, W.A. 7244.
Hammi, P.M. 1529, 3904, 5073.
Hammond, S.M. 2352.
Hammann, R. 4682.
Hammer, M.C. 2505.
Hammerschlag, M.M. 3396, 6008.
Hammerschmidt, R. 444.
Hammond, E.G. 932.
Hammond, J. 6297.
Hammond, J.M. 9496.
Hammond, P.M. 970, 7376, 8266.
Hammond, S.J. 6211.
Hammons, R.O. 9475.
Hampe, S.-E. 6278, 6280, 6281.
Hampton, J.D. 4755.
Hampton, M.C. 8158.
Hampton, K.D. 7253.
Hampton, R. 2092.
Hampton, R.O. 3908, 3929, 5690.
Han, M.H. 2768, 2802, 6165, 8397.
Han, Y.W. 8449.
Hanada, K. 1940.
Hanafy, W. 5957, 6946.
Hanaki, K. 8056.
Hancock, J.G. 4228.
Hancock, R.E.W. 5158, 8148.
Hana, D. 5561.
Hana, A.K. 3902.
Haneshi, T. 3435, 8902, 8903, 9766, 9789, 9790.
Hanel, H. 1966.
Hanf, M. 5109.
Hanka, L.J. 2566.
Hanks, G.R. 7703.
Hannin, R.T. 1184.
Hanna, M.O. 261, 2935, 4808.
Hannan, R.M. 3911.
Hannars, J.L. 1536.
Hannington, G. 5375.
Hannon, B.R. 4418.
Hannoun, C. 6069.
Hannus, K. 2299.
Hansen, B.G. 8827, 8828.
Hansen, D.E. 82.
Hansen, D.J. 169.
Hansen, E.M. 1529, 3904, 5072, 5073.
Hansen, G. 47, 3685, 4667.
Hansen, J.N. 3329.
Hansen, P.E. 5826.
Hansen, S.L. 9729.
Hansen, V.R. 2512.
Hanson, J.R. 3729.
Hanssen, H.-P. 4259.
Hanssen, R. 5256.
Hansson, G. 3259, 8715.
Hantz, O. 9867.
Hanus, F.J. 3578, 5936.
Hanusova, M. 2183.
Hara, A. 4625.
Hara, C. 6569, 7453.
Hara, H. 2658, 2569, 5277.
Hara, K. 7036.
Hara, N. 1854.
Hara, O. 1547, 9219.
Hara, S. 4915.
Hara, T. 911, 1846, 3422.
Harada, K. 3275, 6015.
Harada, K.-I. 8047.
Harada, K.I. 6204.
Harada, S. 1667, 1683.
Harada, T. 964, 4646, 4704, 4764, 6574, 6582.
Harada, Y. 2452.
Haraguchi, H. 8791.
Harasidoni, A. 149, 143.
Harasidoni, W. 3789, 8318, 9265.
Harashima, S. 2863.
Harbec, P.S. 3610.
Harber, M.J. 4489.
Harbison, K.G. 8427.
Harboe, M. 848.
Harborne, J.B. 6846, 7095.
Harbron, S. 5507.
Harcombe, P.A. 4171.
Hardegger, U. 6011.
Harder, D.E. 2136, 3942.
Harder, R.W. 4960.
Harder, W. 98.
Hardie, J.M. 4497.
Harding, G.K.M. 680, 9662.
Harding, R.W. 4643.
Hardisson, C. 2820.
Hardwick, R.C. 5815.
Hardy, B. 8320.
Hardy, J.L. 5477.
Hardy, K. 631, 4582.
Hardy, R.W.F. 6988, 7603, 8702, 9563.
Hardy, S.J.S. 2088.
Haral, E. 3377, 6212.
Hargreaves, J.A. 1356.
Hargreaves, R.T. 5244.
Harginaraya, G. 2138.
Harkness, J.L. 649.
Harian, J. 979.
Harley, J.L. 6973.
Harman, G.E. 2773, 5820, 9481.
Harman, J.E. 7919.
Harmenberg, J. 3363, 6075, 7228, 7942.
Harmon, M.C. 672.
Harmon, M.W. 9840.
Harmon, S.M. 5419.
Harms, N. 4406.
Harnden, M.R. 5210.
Harnik, M. 4695.
Harper, J.E. 606.
Harper, J.P. 5397.
Harper, P.B. 4374.
Harper, S.J. 3216.
Harper, S.S. 6967.
Harrach, B. 4897.
Harrer, J.M. 345.
Harrer, P.B. 6122.
Harrer, W. 7423.
Harrington, T.C. 5082, 9526.
Harris, C.M. 8027.
Harris, D.C. 3208.
Harris, G.P. 8558.
Harris, H. 4801.
Harris, I.J. 9005.
Harris, J. 8653.
Harris, K.F. 5704.
Harris, L.L. 3449.
Harris, L.M. 1090.
Harris, M.E. 224.
Harris, N.E. 474.
Harris, R.W. 3009.
Harris, T.M. 7500, 8027.
Harrison, A.F. 521, 5274, 5089.
Harrison, B.D. 6808.
Harrison, D.C. 5612.
Harrison, D.H. 7101.
Harrison, J.C.L. 181.
Harrison, J.G. 5677.
Harrison, M.B. 4978.
Harrison, M.D. 4003, 4007.
Harrison, M.A. 4086.
Harrison, T.G. 867, 3588.
Harrison, W. 5242.
Harry, T.O. 8052.
Harsch, R.C. 7077.
Harstad, J.B. 9706.
Hart, C.A. 1892, 4342.
Hart, L.P. 8546.
Hart, P.A. 6726.
Hartel, P. 8144.
Hartemann, P. 6251.
Hartill, W.F.T. 2726, 7880.
Hartl, D.L. 7211.
Hartley, B.S. 6532.
Hartman, B.J. 7750.
Hartman, F.C. 6424.
Hartman, J.R. 2135.
Hartman, P.A. 3595.
Hartmann, M.S. 88.
Hartmann, A. 4838.
Hartmann, F. 5321.
Hartmann, H.-J. 4997.
Hartog, B.J. 3566.
Hartwell, D.R. 970.
Hartwig, E.E. 330, 6858, 7733.
Harunmyia, S. 8302.
Harunmyia, H. 7490.
Harvey, F. 9647.
Harvey, I.C. 326, 2481, 4954.
Harvey, J. 206.
Harvey, R.A. 5343.
Harvey, R.J. 6033.
Harvey, W. 7675.
Harvey, R.W.S. 1088.
Hartville, B.G. 2826.
Hasan, S. 369, 9440.
Hasan, Y. 698.
Haschel, H. 8981.
Hasch, A. 4870.
Hasse, T. 4568.
Hasegawa, A. 1970.
Hasegawa, J. 4583, 5474, 5481.
Hasegawa, P. 5149.
Hasegawa, S. 7590, 8247.
Hasegawa, T. 775, 914, 8329.
Hasegaki, Y. 2014, 7483.
Hasegawander, K. 3170, 4213.
Hash, J.H. 2078.
Hashiba, N. 4724.
Hashimoto, A. 2757.
Hashimoto, A.G. 2039, 9630.
Hashimoto, T. 3355, 7043, 7044.
Hashimoto, J. 3044.
Hashimoto, J. 919, 921, 5245.
Hashimoto, M. 5436.
Hashimoto, S. 5298, 5299, 7199, 7200.
Hashimoto, T. 7274, 8274, 9793.
Hashimoto, Y. 4309.
Hasler, S. 4768.
Hass, C.N. 1698.
Hassan, A.B. 7917.
Hassan, K.M. 4294.
Hassing, F. 4875.
Hassouna, N. 1571.
Hassouna, S. 5105.
Hastie, A.C. 3049.
Hata, S. 9187, 9488.
Hata, T. 3435, 7490.
Hataida, M.H. 2791.
Hatakata, K. 6652.
Hatanho, H. 917.
Hatanho, K. 4422.
Hatchikian, E.C. 2741, 3664, 7389.
Hatem, E. 7917.
Hattfield, G.M. 6071.
Hatherill, J.R. 4271.
Hau, Y. 964.
Hatori, Y. 2886, 9778.
Hatta, T. 2154, 4473, 9450.
Hattori, M. 1559, 2433.
Hattori, T. 2345, 2577, 4219, 6342.
Hau, B. 752, 8554.
Hau, F.C. 1123, 3511, 4937.
Hauenstein, A. 7152.
Haufler, K.Z. 9353.
Haugland, R.A. 3578.
Haupt, I. 3285.
Hauschild, A.H.W. 303.
Hausdorff, G. 3685.
Hausen, G. 4029.
Hauser, H. 8079.
Hauser, P. 3454.
Hauka, G. 4564, 4692.
Haumann, E. 3711.

Author index

- Hauswald, C.L. 6439.
Hautefort, B. 3384.
Havalar, A.H. 1717, 8070.
Haverbeck, J. 8482.
Havranek, J. 4430.
Havranek, M. 8885.
Havranek, P. 2094, 2174.
Hawes, M.P. 4938.
Hawes, M.C. 8552.
Hawkins, T.R. 5523.
Hawkey, P.M. 5196, 9739.
Hawthorne, F.G. 4169, 6932.
Hawrot, E. 8232.
Hawthorne, B.T. 9331.
Hay, H. 9690.
Hay, M. 5389.
Hay, M.J.M. 2716.
Hayakawa, H. 8031.
Hayakawa, S. 3796.
Hayakawa, Y. 5542.
Hayano, K. 490.
Hayasaka, T. 7035.
Hayashi, F. 3275, 6015.
Hayashi, H. 3699, 6627, 8383.
Hayashi, I. 7169.
Hayashi, K. 115, 2579, 4471.
Hayashi, M. 1652, 1674, 4415, 5204, 8886.
Hayashi, S. 917, 1863, 4438, 6539.
Hayashi, T. 1564, 9046, 9177.
Hayashida, M. 7169.
Hayashida, S. 108, 150, 1897, 3659, 7696, 8024, 8031, 8305, 9244.
Hayes, A.J. 2200.
Hayes, D. 2389.
Hayes, J. 1789, 4485.
Hayes, J.R. 4902.
Hayes, M.V. 8835.
Hayes, R.D. 4727.
Hayes, T.J. 8894.
Haygood, R.A. 1298, 2229.
Haylock, S.J. 8155.
Hayman, D.S. 570, 9537.
Haynes, B. 952.
Haynes, R.J. 5956.
Hays, R. 1485.
Hays, R.I. 8671.
Haystead, A. 6953.
Hayward, A.C. 6304.
Hayward, N.J. 6315.
Hayward, R.S. 1626, 1627.
Hayward, S.B. 6393.
Haywood, G.W. 64, 8240.
Hazen, K.C. 2724.
Hazenberg, M.P. 8812.
Hazeu, W. 7546.
Hazlewood, G.P. 7243.
Heagle, A.S. 8674.
Heal, O.W. 514.
Heale, J.B. 8558.
Healey, A.G. 4067.
Healey, K. 178.
Hearne, M. 5489.
Heaton, S.S. 9515.
Heath, H. 3843.
Heath, H.E. 2732.
Heath, C. 3922, 6737, 6742.
Heath, R.B. 5375, 6294.
Heather, W.A. 539, 2206, 6911, 6917, 6930.
Heaton, J.B. 8569, 8579.
Hebard, F.V. 8623.
Hebel, M. 3803.
Heberling, R.L. 7099.
Hecht, V. 5592.
Hecker, R.J. 1279, 3157.
Heiderstedt, B. 889.
Hedge, R.K. 2062, 2277.
Hedger, J.N. 8197.
Hedger, R.W. 7878.
Hedley-Whyte, J. 7205.
Hedley, M.J. 567.
Hedstrom, S.A. 9919.
Heel, R.C. 4288, 8782.
Heeschen, W. 21, 1073, 2067, 5644.
Hefflich, R.H. 9023.
Hegab, A. 2169.
Hegab, A.M. 3057.
Hegazi, N.A. 9598.
Hegedues, M. 7204.
Hegeman, G.D. 9785.
Hehlmann, R. 1760.
Heichel, G.H. 9578.
Heidelbaugh, N.D. 1092.
Heider, L.E. 9882.
Heidt, P.J. 5332.
Heier, H. 3302.
Heifets, L.B. 3309.
Heifetz, S.B. 8896.
Heijbroek, W. 618.
Heilmann, P. 9512.
Heim, D. 3015.
Heimer, G.V. 4471.
Hein, A. 6805, 6887.
Heinhuis-Walther, J.M.C. 4455, 4458.
Heinmoe, D.F. 2363, 2365.
Heinonen, J. 878.
Heinonen, J.K. 8000.
Heinonen, O.P. 8079.
Heinrich, M. 1842.
Heinrich, P. 4669.
Heinrich, S. 3290.
Heinrich, U. 3477.
Heinrichs, E.A. 5548.
Heinritz, B. 4264, 4266.
Heins, S. 7937.
Heinz, D.J. 6859.
Heinzer, I. 3618, 5387.
Heinze, E. 5433, 9994.
Heise, H. 872.
Heitfuss, R. 482, 483, 1165, 1352, 1362, 3145, 4060, 4957, 6857.
Heitfuss, R. 8706.
Heizler, M. 7146.
Hejny, J. 679.
Hejzlar, H. 5240.
Hejzlar, M. 4351.
Hejman, W. 2097.
Hejmatt, A.M. 6304.
Helander, I. 9597.
Helander, J.P. 1351.
Helgstrand, E. 5209, 6065.
Helkie, C. 5398.
Helleman, A.-L. 3855.
Helleman, E. 2950.
Helm, H.-U. 389, 3027, 4974, 8562.
Helmreich, E.J.M. 1888.
Helsel, V.L. 4330.
Heltberg, O. 8866.
Herna, G. 9835.
Herna, K. 919.
Herning, V.G. 9938.
Hernod, H.F. 3213.
Hernstreet, C.L. 5987.
Henchal, L.S. 8104.
Henschel, S. 4348.
Henderson, A.R. 2931.
Henderson, L. 6562.
Henderson, P.J.F. 5.
Hendley, J.O. 804, 3491.
Hendricks, D.T. 1801.
Hendrix, F.F. 1217, 4975.
Hendrix, J.W. 8971, 9541.
Hendry, R.M. 4468, 7220.
Hendson, M. 4716.
Hendy, N. 9068.
Henfling, J.W.D.M. 3089.
Hengstenberg, W. 4.
Henry, Y. 410, 412, 2355, 2749, 3065, 5587, 5943, 6968, 7265, 9570.
Henkin, J. 2800.
Hennen, J.F. 423, 2203, 6765.
Hennessey, T.D. 5198.
Henney, H.R.Jr. 1444.
Henning, V.T. 460.
Henningson, E. 2640.
Hennrich, W. 8060.
Hennquet, M. 3549.
Hennquez, A.C. 2982, 2983.
Henrich, D. 1824.
Henrix, F.F. Jr. 5735.
Henry, D.P. 8954.
Henry, E.W. 4033.
Henry, J.E. 990.
Henry, N. 3850.
Henry, N.K. 9947.
Hensei, R. 39, 8278.
Hensens, O. 3436.
Hensens, O.D. 8913, 8914, 8915.
Hensen, K. 5533.
Henschaw, J.N. 7626.
Hensley, D.L. 1506.
Hepper, C.M. 4189, 5933, 6945, 8672.
Heppner, P.R. 5059.
Heptinstall, J. 3511.
Herbin, S.A. 6951.
Herbert, R.B. 7457.
Herbst, W. 21, 1073, 2067, 5644.
Herbst, H. 305.
Hergenroder, R. 9880.
Hering, T.F. 1149.
Hermann, T.E. 6208.
Hermanowicz, S.W. 9059.
Hermans, P.E. 2530.
Herman, W.F. 4784.
Hermansen, J.E. 2127.
Hernandez Gimenez, E. 7914.
Hernandez, E. 2069.
Hernandez, P.E. 2402.
Hernandez, S. 9028.
Hernon, D.N. 8052.
Herr, L.J. 1255, 2124, 2194, 3898, 5008, 8594.
Herraz, M. 9234.
Herrchen, M. 8250.
Herrera, R. 2307, 3218, 3219.
Herrera, T. 243.
Herrington, M.E. 6791.
Hernott, J.B.D. 6953.
Herron, E.E. 7220.
Herrmann, J.E. 4468.
Herruzo Cabrera, R. 4459.
Hershman, D.E. 1241.
Hersing, L.W. 7220.
Herszage, L. 7056, 8774.
Hervet, V. 2167.
Herz, R.E. 9639.
Herzberg, C. 962.
Hess, D.C. 6314.
Hess, H. 938.
Hess, J. 5179.
Hesse, G. 6287.
Hess, R.A. 6301.
Heukeshoven, J. 7228, 8102.
Heungens, G. 2950.
Hewes, M. 3291, 3124, 3131, 3133, 5816.
Hewitt, P.D. 3937.
Hewitt, G.M. 2813, 6657.
Hewlett, E.L. 3323.
Hey, Y. 4617.
Heyde, E. 5487.
Heye, C.C. 5825.
Heyes, R.H. 8944.
Heyne, E.G. 2240.
Heyler, P.G. 8702.
Hibbard, A.M. 7742.
Hibi, T. 1129.
Hibura, R. 6087.
Hiscada, Y. 4300.
Hisamatsu, M. 6574, 6582.
Hisano, T. 4104.
Hishmat, O.H. 8757.
Hitchcock, D.R. 1817.
Hitchcock, P.B. 3729.
Hitchcock, P.J. 9045.
Hitchins, A.D. 7600.
Hite, R.E. 1370.
Hitokoto, H. 277.
Hitzel, J.C. 709.
Hitu, J. 4915.
Hiura, U. 6840.
Hiza, T. 7558.
Hjorth, R. 1747.
Hjortso, M.A. 3633.
Hjortso, H. 3460, 3470.
Ho, C.H. 1585.
Ho, L.W. 2883.
Ho, M. 7108.
Ho, W.C. 3179, 5731.
Hoare, R.J.T. 4462.
Hogan, K. 8500.
Hobbs, B.C. 5285.
Hobbs, J.N. Jr. 652.
Hobbs, S.L.A. 5951, 7852.
Hobert, K. 8912.
Hobom, B. 6017.
Hobrand, C. 2640, 4765, 7254.
Hobson, P.N. 9798.
Hochmannova, J. 7248.
Hochstein, H.D. 6728.
Hockenhull, D.J.D. 5237.
Hocking, A.D. 5437.
Hodan, J. 1049.
Hodges, C.F. 5718, 9387, 9458.
Hodges, C.S. 5870, 9410.
Hodges, S.L. 7099.
Hodgeson, J.A. 5524.
Hodert, L.L. 4036.
Hofle, G. 8880, 8887.
Hogberg, P. 2236.
Hoehne, C. 748.
Hoehne, W. 47.
Hoehne, W.E. 4667.
Hoekstra, M. 1940.
Hoeltje, J.-V. 2465.
Hoepflich, P.D. 7935.
Hoerber, G. 6746.
Hoerger, O.L. 8107, 8108.
Hoerger, K. 6036.
Hof, H. 3328.
Hoff, J.C. 2488.
Hoffman, J.A. 1196.
Hoffman, K. 9920.
Hoffman, R.J. 7854.
Hoffman, R.M. 1380.
Hoffmann, D.F. 5549.
Hoffmann, G.M. 481, 1183, 1425.
Hoffmann, J.A. 4110, 4111.
Hoffmann, P. 3387.
Hoffmann, S. 6114, 6333, 6334.
Hofle, G. 1653.
Hoffmann, A. 4213.
Hoffmann, E. 2782, 6432.
Hoffmann, P. 9191.
Hofstee, J. 7400, 7402.
Hogaboam, G.J. 1279.
Hogan, C. 3750, 4727.
Hogan, P. 7594.
Hogarth, B.G. 5894.
Hogarty, S.L. 4802.
Hogben, E.M. 6038.
Hogg, R.W. 6374.
Hohenberg, J.S. 598.
Hohlweg-Majer, P. 6042.
Holtink, K.A. 2854.
Holtink, H.J. 3122, 4040.
Holtberg, I.B. 5573.
Holtenberg, S.J. 7399.
Holm, L.V. 2845.
Holm, A.J. 4235, 6953.
Holm, J. 498.
Holker, J.S.E. 4698, 7287.
Holl, F.B. 9604.
Holland, H.L. 7218.
Holland, K.T. 6529, 7064, 7312.
Holley, R.A. 6676.
Holliday, M.J. 501.
Hollings, M. 1119.
Hollins, T.W. 9367.
Hollis, C.A. 544, 2322.
Hollocher, T.C. 596, 5118.
Hollomon, D.W. 4128.
Hollisi, M. 9788.
Holloway, V. 1620, 5179.
Hollowell, D.C. 6034.
Hollowood, N.W. 7572.
Holm, S. 2695.
Holmes, D.S. 3510, 3553.
Holmes, M. 6004.
Holmes, R.J. 5724.
Holmes, R.K. 3869, 7642, 8524.
Holmgren, A. 5463.
Holmquist, C.E. 2774.
Holmquist, B. 8277.
Holms, J. 6199.
Holodnick, E. 5147.
Holota, J. 9252.
Holt, O. 2856.
Holt, D.M. 2005, 8426.
Holt, G. 9713.
Holt, H.A. 4367, 6134.
Holt, J. 7136.
Holmman, H. 709.
Holman, T. 5393.
Holtzman, G.H. 5147.
Holwerda, R.A. 7366.
Holy, A. 9663.
Holzapfel, W.H. 2028.
Holzer, H. 8283.
Holzner, T. 7390.
Holzmann, H.-P. 4213.
Honna, J.Y. 1669.
Honda, A. 4441.
Honda, T. 292, 6714, 9305, 9881.
Honey, Y. 1129, 3797, 5672, 6813.
Hong, L. 6381.
Hong, L.T. 7791.
Honzo, R.B. 23.
Hooper, J.K. 8894.
Hood, E.L. 1158.
Hood, L.A. 7785.
Hofmann, C. 2640, 4765, 7254.
Hoogkamp-Korstanje, J.A. 741.
Hooper, W.J. 1290, 2197.
Hooper, A.B. 8282.
Hooper, A.J. 6762.
Hooper, D.C. 3594.
Hooper, W.L. 2634.
Hoos, E. 8670.
Hooser, L.E. 2690.
Hooton, T.M. 2528.
Hoover, M.R. 3101.
Hooykaas, P.J.J. 4488.
Hopfer, R.L. 9675.
Hopkins, D.L. 392, 3058.
Hopkins, K.A. 3550.
Hopmans, P. 2366.
Hopp, H. 1394.
Hopp, H.-U. 1665.
Hoppe, H.H. 1352, 8543.
Hoppe, T.C. 6487.
Hopwood, D.J. 763, 1521, 1523.
Hoq, M.M. 3726.
Horacek, G.L. 1571.
Horak, R.M. 8506.
Horan, N.J. 9129.
Hordijk, K.A. 7553.
Horn, K. 8207.
Hori, M. 3422.
Horie, T. 1587.
Honkoshi, K. 4515, 7127.
Honkoshi, T. 4258.
Honouchi, S. 9219.
Hori, T. 6401, 7296.
Horitsu, H. 498, 1854, 2006.
Honuchi, T. 9180.
Honuchi, T. 1655, 6152, 8853.
Horn, G.W. 254.
Horne, P.N. 5424.
Horn, C.E. 1488, 1529.
Horn, S.E. 3880.
Horn, J.-P. 3589.
Hornick, S.B. 5981, 5983.
Horodniceanu, T. 724.
Horowitz, A. 4760, 6648.

- orowitz, A.M. 3501.
 Orville, H. 812.
 Orvold, R.K. 7797, 7798.
 Orvath, J. 3082, 3083, 3085.
 Orvath, Z. 6663.
 Orvath, J.A. 9262.
 Osaka, K. 8222.
 Osoford, R.M.Jr. 1152.
 Osoford, C. 3755.
 Oshino, T. 1673, 3155.
 Oshino, Y. 252.
 Oshiyah, D.F. 2038, 2920.
 Osohno, H. 4557, 4581, 8204.
 Osohno, K. 7176, 7303, 7304, 7305.
 Osohno, M. 8196.
 Osohno, S. 5850.
 Osohno, T. 5540, 7321, 8004.
 Osohno, T.D. 7485.
 Osohno, T. 1539, 1655.
 Osohno, T. 3585.
 Osohno, C.F. 1981, 5552.
 Osohno, C.T. 4761, 5146, 6474.
 Osohno, T. 7480, 7482.
 Osohno, W.A. 6147.
 Osohno, R.A. 2086.
 Osohno, C.E. 1882.
 Osohno, M.C. 5473.
 Osohno, J. 1371.
 Osohno, T. 1762.
 Osohno, H. 7398.
 Osohno, S. 6486.
 Osohno, A.J. 2061.
 Osohno, C.M. 5007, 9425.
 Osohno, R.J. 1230, 7659.
 Osohno, S.C. 795.
 Osohno, W.J. 9510.
 Osohno, K.M. 1626, 1627.
 Osohno, J.W. 4221.
 Osohno, C.L. 4460.
 Osohno, C.R. 1648, 5831.
 Osohno, C.L. 4770.
 Osohno, C.R. 2841.
 Osohno, W.J. 6937.
 Osohno, G. 1058.
 Osohno, G.L. 4377.
 Osohno, J.W. 2639.
 Osohno, M. 4299.
 Osohno, E.M. 1508, 4242.
 Osohno, V. 3545.
 Osohno, J.F. 9855.
 Osohno, M. 5641.
 Osohno, G.D. 7231.
 Osohno, C.-C. 3.
 Osohno, H.-W. 5424.
 Osohno, C. 8709.
 Osohno, S.C. 2671.
 Osohno, S.-C. 8056.
 Osohno, T.W. 3341.
 Osohno, P.C. 9870.
 Osohno, R.L.F. 8631.
 Osohno, D. 26.
 Osohno, E.-S. 7111, 9689.
 Osohno, J.W. 3093.
 Osohno, Y.-W. 4849.
 Osohno, Z. 8150.
 Osohno, J.P. 5820.
 Osohno, S. 33.
 Osohno, A. 9909.
 Osohno, M. 1070, 5814.
 Osohno, L.-K. 305.
 Osohno, D.M. 6986.
 Osohno, F. 8843.
 Osohno, F.M. 7994.
 Osohno, J. 997, 8354.
 Osohno, P. 8387.
 Osohno, S.J. 8692.
 Osohno, T.F. 4261.
 Osohno, T.W. 9837.
 Osohno, M.J. 4576.
 Osohno, G.W. 4392.
 Osohno, G.W. 3175.
 Osohno, K. 4141.
 Osohno, J.H. 1490.
 Osohno, J.R. 7097.
 Osohno, J.R. 9877.
 Osohno, J.P. 187.
 Osohno, J. 26.
 Osohno, J.B. 5478.
 Osohno, H. 6504.
 Osohno, R. 4382.
 Osohno, A. 4156, 5598.
 Osohno, H.E. 808.
 Osohno, J.M. 5086.
 Osohno, C.D. 7458.
 Osohno, P.G. 2479.
 Osohno, M.B. 2049.
 Osohno, J.L. 7485.
 Osohno, J.W. 8797.
 Osohno, A. 5280, 8469.
 Osohno, J.M. 1710, 2040.
 Osohno, H. 6442.
 Osohno, K.-S. 7551.
 Osohno, M. 7551.
 Osohno, N. 9431.
 Osohno, C. 3903.
 Hussman, W. 6376, 6437.
 Hussman, T. 1763.
 Hull, L.A. 6874.
 Hull, R. 3957, 6299.
 Hull, R.R. 3820, 4804, 9274.
 Hull, W.E. 6696, 6700.
 Hulme, M.A. 6614.
 Hult, K. 5514.
 Hultberg, H. 880, 5402.
 Hultmark, D. 1551.
 Hummel, I. 1665.
 Humpherson-Jones, F.M. 463, 508, 1229, 4042.
 Humphrey, A.E. 9056.
 Humphreys, D.R. 2213.
 Hunokova, S. 3834.
 Hung, K.S. 3086.
 Hung, L.-L. 5900.
 Hung, T.V. 4493.
 Hungate, R.E. 8431, 9259.
 Hunger, R.M. 1403, 1529.
 Huniker, D. 5765.
 Huniker, G. 9653.
 Hunstein, C. von 6014.
 Hunt, P.L. 4929.
 Hunt, G. 6905.
 Hunt, G.H. 2683.
 Hunt, J. 8141.
 Hunt, J.M. 8131.
 Hunt, J. 4065.
 Hunt, P.G. 6993.
 Hunt, R.S. 1457, 4146.
 Hunter, A.C. 6270.
 Hunter, B.B. 6352.
 Hunter, E.F. 9918.
 Hunter, G. 9653.
 Hunter, J.E. 1365.
 Hunter, J.R. 4497.
 Hunter, L.D. 1398, 2280, 2281.
 Hunter, R.E. 6929.
 Hunter, W.H. 8758.
 Hunter, C. 8834.
 Huovinen, P. 9554.
 Hup, G. 4875.
 Huppertz, J.L. 4122.
 Huq, A. 2622.
 Huq, M.I. 2622.
 Hurbert, R.E. 7307.
 Hurley, L.H. 5541.
 Hurley, M.A. 9058.
 Hurley, R.H. 4954.
 Hurley, T.R. 2488.
 Hurley, W.K. 4988.
 Hurst, A. 7802.
 Hurst, A. 5280, 5683, 8469.
 Hurst, C.J. 8950.
 Hurwitz, B. 400.
 Husain, A. 116, 6770.
 Husain, H. 1068.
 Huser, H. 6398.
 Huss-Danell, K. 3220.
 Hussain, M. 7350.
 Hussain, R.A. 1588.
 Hussein, M.M.-D. 8309.
 Hussey, R.S. 5095.
 Hustedt, H. 927, 6337.
 Huston, A.C. 7935.
 Hutcheson, R.H. Jr. 3490.
 Hutchins, A.S. 2298.
 Hutchinson, E.P. 5177.
 Hutchinson, G.L. 6995.
 Hutchinson, I.G. 3193.
 Hutchinson, K.J. 3183.
 Hutchinson, S.A. 8378.
 Hutchinson, M. 2853.
 Hutson, R.A. 4028.
 Hutterling, H. 3036.
 Huynh, B.H. 74, 4634.
 Huynh, Q.K. 4595.
 Hwang, B.K. 482, 483, 1362, 4060, 6857.
 Hyde, J.S. 428.
 Hyldig-Nielsen, F. 3429.
 Hynes, R.K. 594, 5106.
 Hynning, P.-A. 2889.
 Iahikura, T. 6215.
 Iandolo, J.J. 2081, 8121.
 Iannini, P.B. 5262.
 Iaria, S.T. 8975.
 Ibe, S.N. 9453.
 Ichihara, W.-D. 6857.
 Ibragimova, S.I. 8659.
 Ibrahim, A.L. 1687, 7188.
 Ibrahim, G.F. 4850.
 Ickeson, I. 7593.
 Ichikawa, M. 4104.
 Ichikawa, T. 250, 3666.
 Ichikawa, Y. 6709, 9790.
 Ichiman, Y. 2702.
 Ichino, K. 2433.
 Ichishima, E. 3684, 6503.
 Idaka, E. 2006.
 Ide, J. 8900, 9792.
 Igarashi, Y. 123, 6619.
 Iglesias, C.F. 9184.
 Iglewski, B.H. 2429.
 Ignoffo, C.M. 1010, 4713, 4722, 7482.
 Iguchi, H. 9203.
 Iguchi, S.M.M. 5185.
 Igwege, E.C.K. 2159, 3905, 4024, 4025, 4981.
 Ihara, D. 5359.
 Ihara, I. 2452.
 Ihara, S. 2452.
 Ihn, W. 3438, 3440, 9788.
 Ili, Y. 964.
 Iida, H. 1353.
 Iida, M. 2886.
 Iida, T. 2453.
 Iiyama, H. 5493.
 Iino, K. 9793.
 Imamura, H. 6219.
 Imamura, K. 6219.
 Iitaka, Y. 1651, 1658, 6219.
 Iitake, Y. 6627.
 Iizuka, H. 2798, 2886, 7605, 8492, 8787.
 Iizuka, N. 6736.
 Iizuka, T. 6491.
 Ika, A. 2763.
 Ikeda, D. 1655, 3717, 4416, 6218, 7055, 9762.
 Ikeda, H. 6166.
 Ikeda, J.-E. 9980.
 Ikeda, R. 6773.
 Ikeda, T. 4423, 6218, 6518.
 Ikeda, Y. 3385, 6218, 8347.
 Ikedobi, C.O. 3847, 4778.
 Ikegami, A. 1879.
 Ikegami, M. 4923.
 Ikehata, A. 1592.
 Ikezawa, H. 8235, 8242.
 Ikonnikov, N.P. 113.
 Ikonnikov, A. 8493.
 Iliag, L.L. 2946.
 Ilchenko, V.Ya. 7392.
 Ilczuk, Z. 5475, 5510.
 Ilievski, V. 4285.
 Ilina, I.V. 1864.
 Ilanes, A. 9615.
 Ilstrup, D.M. 9012.
 Ilits, H.H. 4947.
 Ilyaltednina, A.N. 2383.
 Ilurley, T.R. 8862.
 Ilyina, L.D. 1085, 1991.
 Ilyinskaya, N.A. 1629.
 Imada, I. 1683, 2461.
 Imahori, K. 4640, 6418, 6423.
 Imai, C. 203.
 Imai, H. 9768.
 Imai, S. 2817, 3716, 4570, 6322, 9781.
 Imai, T. 3654.
 Imai, Y. 5849, 5886.
 Imaizumi, A. 8523.
 Imaizumi, F. 1963.
 Imaizumi, N. 7543.
 Imamura, K. 5452, 9778.
 Imataka, H. 9138, 921, 2582, 7451.
 Imoto, M. 9778.
 Imre, S. 223.
 Imshenetsky, A.A. 2354, 2395, 8336, 9001.
 Inaba, T. 9423.
 Inaba, Y. 945.
 Inbal, E. 5944.
 Inch, A.J. 6791.
 Inculet, I.I. 8115.
 Inderlier, C.B. 9939.
 Indrasenan, G. 3149.
 Indulen, M.K. 630, 6066.
 Inenaga, S. 9024.
 Ineson, P. 571, 3212, 3513.
 Ingerfeld, M. 5790.
 Ingham, H.R. 2431.
 Ingham, J.L. 1355, 3143, 7095.
 Ingledew, W.M. 4527, 4528, 7516, 8408, 8452.
 Inglis, D.A. 6771.
 Inglis, J.M. 1704.
 Ingolic, E. 7781.
 Ingraham, J.L. 5107.
 Ingram, D.S. 2211, 2212, 6820.
 Ingram, E. 6528.
 Ingram, R.L. 1575.
 Inigo, B. 7584, 7585.
 Inioles, D.S. 7513.
 Innes, N.L. 5815.
 Inness, W.E. 1494.
 Inoki, H. 6269.
 Inokuchi, I. 1561.
 Inokuchi, H. 8192.
 Inokuchi, Y. 6269.
 Inoue, A. 6169.
 Inoue, G. 5615.
 Inoue, H. 1162, 4987, 5542, 6101, 6107.
 Inoue, K. 2818, 4707, 6587, 7079, 8274, 8346.
 Inoue, M. 734, 3275, 3304, 3305, 4594, 6015, 6166, 7086.
 Inoue, S. 4383, 5190, 7150, 7151.
 Inoue, T. 5615, 9298.
 Inouye, K. 8030.
 Inouye, L. 5225.
 Inouye, S. 2586, 2824, 3716, 4402, 4414, 6135, 6136.
 Ioannidou, H. 894.
 Ioffe, I.V. 1654.
 Ionescu-Homonceanu, S. 6250.
 Ionescu-Matu, I. 4470.
 Iordan, E.P. 113.
 Iosif, M.I. 8395.
 Ipsen, J. 4752.
 Ipsen, J.D. 4167.
 Ireland, C.M. 8910.
 Irie, M. 1909, 7515.
 Irie, N.K. 8838.
 Iritani, W.M. 3062.
 Iriuchijima, S. 158.
 Irmier, U. 2306.
 Iro, T. 7605.
 Iriyama, K. 8253.
 Irschik, H. 1653, 3433, 4412.
 Irschad, M. 1042.
 Irvin, J.D. 1576, 3368, 9478.
 Irvine, R.L. 1694.
 Irving, L.G. 1767.
 Irving, A.G. 336, 1250, 3991, 4936, 8644.
 Isaac-Renton, J.L. 8863.
 Isaac, I. 584.
 Isaacson, R.E. 1709.
 Isaenko, V.N. 8413.
 Isagari, K. 8347.
 Isakov, V.V. 9199.
 Isamukhamedov, M.Z. 9437.
 Isayama, Y. 2515.
 Isenberg, H.D. 9715.
 Ishaque, M. 4679, 6050.
 Ishai, K. 9615, 7300.
 Izui, K. 8109.
 Ishida, Y. 3689, 6457.
 Ishiguro, E.E. 7290.
 Ishiguro, Y. 857.
 Ishii, H. 8647.
 Ishii, K. 6220, 6221, 8520.
 Ishii, M. 4895, 6619.
 Ishii, S. 302.
 Ishii, S.-I. 2574.
 Ishii, Y. 3155.
 Ishikawa, F. 6386.
 Ishikawa, N. 9221.
 Ishiyama, T. 1649, 1650, 2823, 8911, 8918, 9203, 9712.
 Ishmaru, K. 8906, 9794.
 Ishimoto, M. 5500.
 Ishimoto, N. 6448, 6450.
 Ishitani, Y. 3789.
 Ishiyama, T. 901.
 Ishizaki, H. 3949.
 Ishizaki, K. 1592.
 Ishizaki, N. 5561.
 Ishizaki, T. 4309.
 Ishizuka, M. 7452.
 Ishiyakova, K.H. 1600.
 Isleib, T.C. 452.
 Ismail, A. 1941.
 Ismail, I.K. 5973.
 Ismail, M.H. 7702.
 Ismail, Y.M. 5594.
 Isobe, K. 1861.
 Isogai, A. 915, 8338, 9774.
 Ison, C.A. 3331.
 Isono, K. 4396, 7288.
 Israel, A. 6265, 6267.
 Issel, C.J. 8097.
 Ishiki, K. 6215.
 Isvan, P.I. 707.
 Iswaram, V. 5121.
 Iswaran, V. 2370, 5948, 8677, 8770.
 Itatani, Y. 7456.
 Ito, A. 6720.
 Ito, E. 5532, 6448, 6450.
 Ito, H. 8492, 8787.
 Ito, K. 125, 302, 1980, 2433.
 Ito, M. 57, 6451, 7233, 7450.
 Ito, S. 8047.
 Ito, T. 9302.
 Ito, H. 1666, 8891.
 Itoh, J. 2586, 4402.
 Itoh, K. 942, 3552, 6553.
 Itoh, N. 6510.
 Itoh, T. 950.
 Itoh, Y. 1939, 2589, 8902, 8903.
 Ilyaltednina, A.N. 8943.
 Iuchi, S. 59, 1942, 1943.
 Iutskaya, G.A. 9623.
 Ivantisa, V.A. 1933.
 Ivantitskaya, L.P. 769, 780, 1647, 1656, 1670, 1678, 4337, 6101, 6107.
 Ivankova, T.A. 684, 1639.
 Ivanov, E.L. 1808.
 Ivanov, G.G. 770, 2594, 8867.
 Ivanov, K.K. 9661, 7635.
 Ivanov, N.A. 573.
 Ivanova, G.S. 7267.
 Ivanova, I.A. 8897.
 Ivanova, I.G. 99.
 Ivanova, L.L. 7527.
 Ivanova, N.I. 5179.
 Ivarson, K.C. 5890, 6891.
 Ivaskiva, S.V. 9692.
 Iversen, T. 2821.
 Iwins, B.E. 2085.
 Ivshina, I.E. 628, 2664.
 Iwabuchi, T. 5211.
 Iwado, S. 8902, 9789.
 Iwagami, H. 6097.
 Iwahara, S. 4730, 8439.
 Iwai, H. 1939.
 Iwai, Y. 3354, 3432, 4724, 6190.
 Iwaki, M. 1129, 5672, 6813.
 Iwama, M. 7315.
 Iwamatsu, K. 4414, 6135, 6136.
 Iwami, M. 2552, 3732, 7451.
 Iwamoto, G. 8338.
 Iwamura, Y. 3709, 3710.
 Iwanami, M. 9768.
 Iwasaki, A. 1666, 8891, 9759.
 Iwasaki, S. 3445.
 Iwasawa, H. 3717, 4416, 9762.
 Iwasawa, S. 3747.
 Iwasawa, Y. 7282.
 Iwase, I. 5371.
 Iwata, R. 6190.
 Iyama, S. 8682.
 Iyayi, C.B. 162, 164.
 Iyengar, D.S. 6084.
 Iyengar, L. 46.
 Izaki, K. 2570, 2571, 2589.
 Izard, D. 8979.
 Izawa, T. 5971.
 Izotova, V.S. 7393.
 Izui, K. 8109.
 Izumi, Y. 3652, 3660, 8381.
 Izumiya, N. 2424, 5264, 9786.
 Izumori, K. 4652.
 Izumoto, E. 3818.
 Izzo, G. 8065.
 Jabes, D. 1611.
 Jackman, D.M. 8291.
 Jackman, P.J.H. 8091, 9887.
 Jackson, C.G. 5.
 Jackson, G.V.H. 9424.
 Jackson, K.J. 1250.
 Jackson, K.W. 1883.
 Jackson, L.K. 7437.
 Jackson, N. 3933.
 Jackson, R.B. 7001.
 Jackson, R.H. 73.
 Jackson, R.M. 1441.
 Jackson, T.L. 9361.
 Jacob, A. 1034, 3719.
 Jacob, A.J. 9839.
 Jacob, B. 2819.
 Jacob, H. 3701.
 Jacob, H.E. 5384.
 Jacoby, W.R. 3050, 4169.
 Jacobs, D.M. 9296.
 Jacobs, G.P. 5173.
 Jacobs, L.A. 4192.
 Jacobs, M.R. 723, 8817.
 Jacobs, R.P.W.M. 5070.
 Jacobsen, B.D. 5826.
 Jacobsen, B.J. 6869.
 Jacobsen, K. 3429.
 Jacobson, G.R. 82.
 Jacobson, K. 730.
 Jacobson, R.H. 862, 9849.
 Jacobus, N.V. 685, 777, 5262.
 Jacoby, A. 6197.
 Jacoby, E.L.Jr. 9561.
 Jacoby, G.A. 7878, 8287.
 Jaco, V.A. 6968.
 Jacquesy, J.C. 8775.
 Jadera, L. 7977.
 Jadot, R. 2266.
 Jadnickova, E. 3460, 3470.
 Jae, C.M. 6520.
 Jaeger, K.-E. 7412.
 Jaffe, A. 1542, 5165.
 Jaffe, B.M. 2485.
 Jaffri, R.H. 293.
 Jagannathan, V. 30.
 Jager, G. 2097, 6789, 9429.
 Jago, G.R. 4542.
 Jagow, J.A. 4903.
 Jahan, O. 903.
 Jahnke, L. 8216.
 Jain, B.L. 3964, 7726.
 Jain, D.K. 9800.
 Jain, J.C. 5591.
 Jain, R.P. 5807.
 Jain, S.K. 8571.

Author Index

- Jacobson, I. 1481, 4189, 5902.
Jacevac, J. 1925.
Jail, M.A.F. 5929, 5930.
Jaisariak, I. 9289.
Jamal, F. 639.
James, A.P. 2733.
James, A.T. 8279.
James, R. 9729.
James, R.L. 541, 9526.
James, R.W. 8621.
Janet, M. 2421.
Janardhanan, K.K. 116, 6770.
Janarata, A. 3551, 7146.
Janda, I. 1832.
Janda, J.M. 6012.
Jandasek, L. 3460, 3470.
Jandel, A.S. 927.
Janderova, B. 7323.
Janicha, J. 8081.
Janich, P.A. 2783, 2807.
Janicka, I. 6888, 8608.
Janik, P. 9987.
Janke, D. 7556.
Jankowski, M. 820.
Jankowski, M.A. 6289.
Jankutola, M. 1240, 7223.
Jann, B. 9191.
Jann, K. 110, 5534, 9191.
Jannsen, H.G. 4577.
Janos, E. 4075.
Janos, J. 8721.
Janota, J. 9010.
Janoukova, I. 4503.
Janowksi, N.T. 1072.
Janschke, N.S. 64.
Janse, J.D. 4172.
Jansen, D. 8352.
Jansen, N.B. 8398.
Jansen, R. 8880.
Jansen, W.J. 9485.
Janshekar, H. 171.
Janszus, J.D. 900, 6380.
Jansz, K. 4317.
Janssens, J.H. 2866.
Jansson, P.-E. 9195.
Januallitis, A. 4688.
Janusviciute, P.J. 1855.
Januszewski, J. 812, 977.
Jany, K.-D. 8273.
Janz, C. 697.
Jap, B.K. 6393.
Japel, M. 3342.
Jaques, R.P. 6596.
Jark, P. 5461.
Jarkij, O.A. 6757.
Jarkies, M.M. 5724.
Jarlir, V. 8813.
Jarmar, T.R. 2746, 9129.
Jaris, R.N. 5283.
Jarsen, S. 8182, 9209.
Jarselli, S.T. 1014.
Jarrell, K.F. 3303.
Jarrell, W.M. 3210, 5599, 7804.
Jarrett, P. 991.
Jarvis, B. 3878, 4841.
Jarvis, G. 5222, 7503.
Jarvis, B.D.W. 8696.
Jarvis, G. 303.
Jarvis, G.A. 3512, 3575.
Jarvis, J.L. 361.
Jarvis, W.R. 3998.
Jaskiewicz, B. 4688.
Jatimiansky, J.R. 8701.
Jatta, E. 1720.
Jaurin, B. 86.
Jaworski, A. 3704.
Jaworski, C.A. 5049.
Jayaalkshmi, B. 2142.
Jayaraman, K. 5838.
Jayaraman, M.S. 188, 1535, 5232.
Jayasankar, N.P. 1227.
Jayaweera, V. 3588.
Jayas, D.B. 9561.
Jaynes, P.K. 932.
Jean, A. 222.
Jeansson, S. 9843.
Jeblich, W. 6461.
Jechova, V. 7321, 8004.
Jedrich, H. 365, 445.
Jeffcock, R. 8279.
Jeffries, P. 2647.
Jeffries, T.W. 7534.
Jeger, M.J. 1117, 1201, 3896.
5734, 6781.
Jehon, P.A. 7400.
Jelinek, R. 2068.
Jelliff, J.J. 8863.
Jellits, G.J. 9367.
Jeng, R.S. 4170.
Jenkins, H.M. 3351.
Jenkins, A. 1724.
Jenkins, A.D. 426.
Jenkins, E. 6197.
Jenkins, E.E. 7288.
Jenkins, J. 6380.
Jenkins, E. 9369.
Jenkins, P.A. 2422.
Jenkins, S.F. 6807.
Jenkins, S.F. 8675, 9411, 9415.
Jenkinson, D.S. 568, 5722, 4220.
Jenkinson, S.R. 8768.
Jenkinson, J.F. 5830, 5838, 7676, 9489.
Jenner, L.B. 4936.
Jennings, D.L. 458, 464, 466.
Jennings, H.J. 4701.
Jenniskens, M.J. 2107.
Jennis, A.E. 4069.
Jensen, A. 5905, 6333, 6334, 6943.
Jensen F.C. 7673.
Jensen, H. 8465.
Jensen, S.E. 1613, 1797, 9036.
Jensen, S.G. 9360.
Jensen, W. 6954.
Jenster, V. 2169, 3057.
Jeppsson, U. 8127.
Jeremiah, L.E. 8476.
Jergler, D.E. 5311.
Jerino, F. 6090, 6189.
Jerris, R.C. 3381.
Jeske, G. 3833.
Jessee, J.A. 2900.
Jessen, D.L. 9458.
Jessel, D.M. 830.
Jewell, F.F. Sr. 6910.
Jeyaseelan, L. 4645.
Jezak, P. 3597.
Jezek, P. 2663.
Jeznach, P.A. 9910.
Jhala, H.I. 2409.
Jhanjee, A. 6715.
Jhooley, J.S. 5688.
Jian, H.-R. 5357.
Jiang, B. 1778.
Jiang, Z.-Y. 7427.
Jilek, R. 6658.
Jilkova, M. 2244.
Jinenez-Diaz, R.M. 1192, 1418, 9411.
Jinenez, M. 2069.
Jimpo, K. 8838, 8839, 8840.
Jin, C.K. 144.
Jin, F.-G. 824.
Jindal, J.K. 340.
Jiranovka, A. 1332.
Jirku, V. 6885.
Jizba, J. 7582.
Joannes, H. 549.
Jochen, R.F. 9850.
Joebles, I.M.L. 9215.
Jorgensen, J. 1430.
Joergensen, K. 5339.
Jorrmvall, H. 6721.
Jorgdand, V.V. 166, 3677, 9080.
Joglekar, A.V. 2814, 3677.
Joglar, R. 10000.
Johanning, D. 8743.
Johansen, J.T. 25, 27.
Johanson, J.B. 2338.
Johanson, L. 5618.
Johansson, G. 1875.
Johansson, K.R. 8069.
Johansson, L.-A. 8279.
Johansson, M. 6918.
Johansson, N.-G. 5216.
Johansson, N.G. 5209.
John, E.M. 7149.
John, T.V.S.T. 9180.
John, J.C. 416.
Johns, R.B. 5595.
Johnson-Winegar, A.D. 7639.
Johnson, A.E. 180, 182.
Johnson, A.R. 2921.
Johnson, A.W. 367, 9473.
Johnson, B. 3489.
Johnson, B. 6918.
Johnson, N.-G. 5216.
Johnson, N.G. 5209.
John, E.M. 7149.
John, T.V.S.T. 9180.
John, J.C. 416.
Johns, R.B. 5595.
Johnson-Winegar, A.D. 7639.
Johnson, A.E. 180, 182.
Johnson, A.R. 2921.
Johnson, A.W. 367, 9473.
Johnson, B. 3489.
Johnson, B. 6918.
Johnson, N.-G. 5216.
Johnson, N.G. 5209.
John, E.M. 7149.
John, T.V.S.T. 9180.
John, J.C. 416.
Johns, R.B. 5595.
Johnson-Winegar, A.D. 7639.
Johnson, A.E. 180, 182.
Johnson, A.R. 2921.
Johnson, A.W. 367, 9473.
Johnson, B. 3489.
Johnson, B. 6918.
Johnson, N.-G. 5216.
Johnson, N.G. 5209.
John, E.M. 7149.
John, T.V.S.T. 9180.
John, J.C. 416.
Johns, R.B. 5595.
Johnson-Winegar, A.D. 7639.
Johnson, A.E. 180, 182.
Johnson, A.R. 2921.
Johnson, A.W. 367, 9473.
Johnson, B. 3489.
Johnson, B. 6918.
Johnson, N.-G. 5216.
Johnson, N.G. 5209.
John, E.M. 7149.
John, T.V.S.T. 9180.
John, J.C. 416.
Johns, R.B. 5595.
Johnson-Winegar, A.D. 7639.
Johnson, A.E. 180, 182.
Johnson, A.R. 2921.
Johnson, A.W. 367, 9473.
Johnson, B. 3489.
Johnson, B. 6918.
Johnson, N.-G. 5216.
Johnson, N.G. 5209.
John, E.M. 7149.
John, T.V.S.T. 9180.
John, J.C. 416.
Johns, R.B. 5595.
Johnson-Winegar, A.D. 7639.
Johnson, A.E. 180, 182.
Johnson, A.R. 2921.
Johnson, A.W. 367, 9473.
Johnson, B. 3489.
Johnson, B. 6918.
Johnson, N.-G. 5216.
Johnson, N.G. 5209.
John, E.M. 7149.
John, T.V.S.T. 9180.
John, J.C. 416.
Johns, R.B. 5595.
Johnson-Winegar, A.D. 7639.
Johnson, A.E. 180, 182.
Johnson, A.R. 2921.
Johnson, A.W. 367, 9473.
Johnson, B. 3489.
Johnson, B. 6918.
Johnson, N.-G. 5216.
Johnson, N.G. 5209.
John, E.M. 7149.
John, T.V.S.T. 9180.
John, J.C. 416.
Johns, R.B. 5595.
Johnson-Winegar, A.D. 7639.
Johnson, A.E. 180, 182.
Johnson, A.R. 2921.
Johnson, A.W. 367, 9473.
Johnson, B. 3489.
Johnson, B. 6918.
Johnson, N.-G. 5216.
Johnson, N.G. 5209.
John, E.M.

- Karmanova, G.I. 7876.
Karminski-Zamola, G. 6314.
Karminski, W. 9490.
Karn, J.F. 6548.
Karnaushkina, A.I. 6230.
Karnetova, I. 8034.
Karnop, G. 3808, 3825.
Karnop, T.K.B. 6083.
Karolick, J. 300, 3891.
Karpiński, T. 2438.
Karpov, V.L. 6231.
Karpova, M.A. 18.
Karpow, S.A. 6002.
Karst, G. 6398.
Karst, I. 1804, 1976, 3584.
5430, 905.
Karunakara Babu, M. 493.
Kas, J. 7322.
Kasai, M. 1671.
Kasai, N. 964, 2735, 3692.
Kasai, T. 1669.
Kasakura, T. 4449.
Kasatiya, S. 9974.
Kasatiya, S.S. 3480.
Kase, H. 6195.
Kashchenyuk, T.A. 7922.
Kashimura, N. 701.
Kashwagi, Y. 2771, 8166.
Kashkina, G.B. 2964.
Kashiyeva, T.K. 1640, 7969.
Kasim, A. 533, 3165.
Kasmer, S. 9022.
Kasova, V. 3460, 3470.
Kaspersen, A. 9282.
Kasprzyk, F.Y. 8653.
Kassim, A. 1068.
Kassim, E.A. 3668, 7426, 8316.
Kassim, G. 5599.
Kastelic-Suhadolc, T. 8373.
Kasumova, S.A. 2664.
Kasutka, K.L. 636.
Kazubská, J. 9880.
Katada, T. 302.
Katae, H. 5190.
Katagin, G. 6313.
Katagin, S. 8647.
Kati, J. 6817, 7768, 8606.
Kati, S. 5152, 7051, 7698, 7900.
Katano, K. 5246.
Katano, M. 3797.
Katana, H.R. 323, 9482.
Katayama, A. 8456.
Katayama, T. 9790.
Kato, H. 1590, 6849.
Kato, J. 118, 8582.
Kato, K. 857, 6845.
Kato, M. 734.
Kato, N. 6516, 8329.
Kato, S. 6463.
Kato, S. 6210, 5264, 9786.
Kato, T. 3286, 6215.
Kator, H.I. 6258.
Katou, K. 3053.
Katruk, E.A. 1978.
Katrucha, G.S. 1642, 6236.
Katsan, V.A. 8163.
Katsan, T. 4086.
Katsuki, H. 965, 3723, 9187, 9488.
Katsura, H. 4306.
Katsura, M. 923.
Katsuyama, Y. 4407.
Kattan, A.A. 256.
Katz, L.C. 9147.
Katz, B.H. 5744.
Katz, E. 3271, 5208.
Katz, M. 9022.
Katz, S. 9025.
Katznelson, E. 873.
Kauffman, C.A. 3632.
Kauffman, D.D. 5977, 9531.
Kauffman, H.W. 5191.
Kauffman, L. 8165.
Kauffmann, R. 4262.
Kaul, A. 8200.
Kaur, R. 9668.
Kaur, Y. 3848.
Kaushal, W.J. 9213.
Kauppinen, K. 7607.
Kaur, B. 8784.
Kaur, M. 7760, 7765.
Kaur, P. 2855.
Kaur, U. 751.
Kaur, T. 524, 4142, 7779.
Kaushal, R. 8022.
Kaushik, C.D. 5769.
Kaur, G. 6461.
Kauter, D.A. 309, 2031.
Kawabata, N. 9046.
Kawabata, S. 2567.
Kawachi, A. 2763, 8217.
Kawachi, H. 5257, 8502, 8888, 8889.
Kawaguchi, K. 6313.
Kawaguchi, N. 8456.
Kawahara, H. 4583, 5474, 5481.
Kawahata, S. 8194.
Kawai, H. 5542, 6575.
Kawai, K. 949, 1854, 3697, 8051, 8796.
Kawai, Y. 918.
Kawakami, M. 1963, 2452.
Kawakami, K. 3095, 4993.
Kawamoto, I. 1668.
Kawamoto, K. 6587.
Kawamura, F. 7178.
Kawamura, S. 1834, 2668.
Kawamura, T. 6448, 6450, 7589.
Kawamura, Y. 4625.
Kawanishi, T. 9720.
Kawano, K. 6828.
Kawano, H. 5896.
Kawashima, K. 9177.
Kawashima, S. 5251, 5253.
Kawashima, T. 175.
Kawashima, T. 233, 6619.
Kawata, K. 7045.
Kawata, T. 2742, 9124.
Kawauchi, H. 7169.
Kawauchi, S. 252.
Kawauchi, Y. 929.
Kawazu, M. 6153.
Kay, D. 1724.
Kay, W.W. 7290.
Kaya, S. 5532.
Kayashima, K. 4494, 6472.
Kaye, C.M. 3331.
Kaye, D. 8826.
Kaye, A.J. 9531.
Kaysner, F.H. 8808.
Kaysner, C.A. 3636.
Kazakova, O.V. 8199.
Kazanskaya, L.V. 8515.
Kazanskaya, N.F. 1891.
Kazantseva, V.A. 3520.
Kazdoba, I.S. 7635.
Kazuo, Y. 6510.
Kazluskas, D.A. 1855.
Kazmierczak, A. 6125, 7134.
Kazungu, C. 420.
Keane, C.T. 9904.
Keane, P.J. 2720, 7679.
Keane, P.C. 5581.
Keast, D. 9882.
Kear, N. 6842.
Keeling, J.M. 8823.
Keeling, B.L. 328, 349, 1145, 7733.
Keen, N.T. 498, 501, 2471.
Keen, R.M. 4742.
Keeratipibul, S. 9643.
Kefalas, S. 8753.
Keha, E.E. 52.
Kejlbets, M.J.H. 4883.
Keil, B.F.P5Khaier, U.Y. 7871.
Keilich, G. 307, 1108.
Keith, W.M. 2432.
Keith, G. 9860.
Keiyu, A. 158.
Kelchheeva, N.G. 1640, 7969.
Kelkos, D. 2772.
Kell, D. 4718.
Kelleher, S.D. 8458.
Kellen, W.R. 5549.
Kellens, J. 2420.
Keller-Schierlein, W. 8387, 8907, 9201.
Keller, B. 7308.
Keller, D.M. 9828.
Keller, E. 7308.
Keller, P. 8969, 9628.
Kellermann, O.K. 6373.
Kellott, M. 6201.
Kelley, E. 3347.
Kelley, R.L. 1517.
Kelley, R.W. 8135.
Kelley, W.D. 1467.
Kelley, W.S. 7379.
Kelly, A. 3465.
Kelly, C.T. 4657, 7431, 9168.
Kelly, D.C. 795.
Kelly, F. 723.
Kelly, M.T. 5160, 9941.
Kelly, N.M. 9904.
Kelly, W.J. 8823.
Kelman, A. 2335, 5033.
Kelso, W.I. 9978.
Keltstrup, J. 8025.
Keltjens, J.T. 4576, 4577.
Kemmer, T. 4412.
Kemp, D.J. 9874.
Kemp, J.D. 180, 182.
Kemp, M.S. 6844.
Kemp, T.R. 7709.
Kemp, J. 5883.
Kempson, A.G. 6676.
Kempson, R.J. 2801.
Kendall, W.A. 9329.
Kendrick, B. 2327.
Kendrick, K.E. 9042.
Kenealy, W.R. 3262.
Kenealy, C.M. 5867.
Kenne, L. 9196.
Kennedy, B.W. 3251.
Kennedy, C.W. 7499.
Kennedy, D.M. 1415, 4533.
Kennedy, E.J. 9918.
Kennedy, G.G. 6807, 6809.
Kennedy, J.E. 841.
Kennedy, J.E. 244.
Kennedy, J.F. 2765, 3388.
Kennedy, K.J. 4435, 8716, 8929, 9807.
Kenneth, R. 9335.
Kenney, A.C. 972, 4690.
Kenney, D.M. 8513.
Kennis, H.M. 3546.
Kenny, G.E. 9932.
Kent, M.L. 1785.
Keogh, P.B. 4806, 8103.
Kepes, A. 2734.
Kerbs, S.B. 5242.
Kergomard, A. 130, 1994, 2597.
Kerkerling, T.M. 8790.
Kerlavage, A.R. 1775.
Kern, H. 6741, 7049.
Kern, H.W. 6643.
Kernbaum, S. 8012.
Kerr, R. 7256.
Kerr, I.M. 3345.
Kerschler, L. 922.
Kershaw, S.J. 1096.
Kersten, P.J. 1849.
Kerstens-Hilderson, H. 6436.
Kerstens, K. 419.
Kerter, J.A. 837.
Keskär, S. 4740.
Kesler, E. 2916.
Kesler, E.M. 7599, 8071.
Kessels, J.M.M. 3703.
Kessler, R. 2782.
Kessock-Phillip, S. 3563.
Kester, H. 4645.
Keswani, C.L. 7673, 7698.
Kesswick, B.H. 3479.
Ketner, P.J. 3866.
Kettner, M. 640.
Kettner, J. 4298.
Keyvork, N.N. 2664.
Keya, S.O. 5906, 8669.
Keyes, G.J. 1340.
Keyser, H.H. 4249, 8700.
Khabarova, M.I. 8284.
Khatami, S.G. 3694, 3876.
Khatatunian, A.A. 8368.
Khachikian, L.A. 7826, 7827.
Khafif, H. 5904.
Khaidarov, T.B. 1787.
Khindova, E. 3656.
Khair, A.E.M. 2618, 2619.
Khakimov, M.M. 1787.
Khalafallah, M.A. 5892.
Khalil, J.A. 408.
Khalil, A.-G.M. 2930.
Khalil, M.E. 1158.
Khalil, S. 3705.
Khan, A.W. 5574, 5575, 7545, 8441, 9251.
Khan, M.A. 2985, 4983.
Khan, M.K.A. 3352.
Khan, M.R. 1874.
Khan, M.S. 3976.
Khan, M.U. 2635, 5356.
Khan, M.Y. 3401, 3444.
Khan, T.N. 1173, 1181.
Khan, W.N. 647.
Khan, Z.A. 7939.
Khasanov, D. 8285.
Khandekar, P.S. 7445.
Khandjian, E.W. 3306.
Khanna, S. 7319.
Khansari, N. 5434.
Khanitieri, E.I. 9758.
Khanumrutan, T.A. 6713.
Kharajan, H. 6240.
Kharbuli, P.P. 3162.
Khare, M.N. 4963.
Kharitonov, I.G. 3266.
Khatenever, M.L. 3279.
Khatijah, M. 5594.
Khasenzon, S.L. 5405.
Khehra, A.S. 2131.
Khenkina, L.M. 4265.
Khmelnitsky, M.I. 2410, 7875.
Khodova, O.M. 8281.
Knoe, G.P. 7644.
Knochlov, A.S. 8782.
Knochlova, I.G. 2346.
Khokhlova, N.A. 6303.
Khorasani, Y. 1725.
Khudchenko, G.V. 5166.
Khudobergenov, R. 246.
Khurana, A.L. 5969, 9606.
Khurana, C.M. 6111.
Khush, G.S. 9364, 9459.
Kiapapan, S. 3795.
Kikardina, N.N. 7876.
Kikuth, R. 5320.
Kida, M. 3700.
Kiddy, D.K. 1498.
Kidin, V.V. 3246.
Kiechle, F.L. 8206.
Kieninger, H. 2862.
Kiernan, J.M. 6971, 9541.
Kikutan, M. 131.
Kiesling, K.-H. 311.
Kietreiber, M. 1190.
Kiffer, E. 1439.
Kihara, K. 8103.
Kih, T. 6569, 7459.
Kikuchi-Toni, K. 1883.
Kikuchi, H. 9707.
Kikuchi, S. 924.
Kikuchi, T. 2576.
Kikuchi, Y. 252, 277.
Kilbane, J.J. 1059, 4750.
Kilbertus, G. 1439, 1486.
Kilburn, J.O. 9538.
Kile, G.A. 8652.
Kilen, T.C. 330.
Kilosso, V.A. 5166, 8331.
Kilohoff, M.-C. 7349.
Kilian, S.G. 7533.
Kilham, K. 7853, 9076.
Kilroy, W.J. 5353.
Kilpatrick, M.W. 6507.
Kilpi, S. 2878.
Kilby, D.C. 4455, 4458, 8468.
Kilbert, S. 1439, 1486.
Kim, C. 2534.
Kim, C.K. 5335.
Kim, H.S. 16, 7581.
Kim, I.H. 9263, 9749.
Kim, J.H. 9069.
Kim, J.S. 125, 1980.
Kim, K.-S. 2728, 2994, 9075.
Kim, K.W. 5515.
Kim, W.Y. 71.
Kim, Y. 678.
Kim, Y.M. 9795.
Kim, Y.S. 8245.
Kimbrough, J.M. 4192.
Kimura, A. 1960.
Kimura, C. 1894.
Kimura, K. 4635, 6428.
Kimura, S. 1666, 1942, 1943, 7169, 9759.
Kimura, T. 3318, 9171.
Kimura, Y. 2735, 3692, 4417, 5501, 6618, 8339.
Kinashi, H. 3448.
Kinde, H. 3840.
Kiyohara, H. 5144.
King, A. 2550, 4378.
King, A.D. 4803, 8247.
King, B. 3765.
King, D.J. 3667.
King, E. 5030.
King, F.D. 1147.
King, H. 1540.
King, H.C. 3277.
King, J. 5464.
King, J.E. 9369.
King, J.W. 845, 2539, 3799.
King, K. 649.
King, K.L. 3183.
King, S.B. 1168.
King, S.W. 4742.
King, T.C. 7920.
Kingham, G.R. 3583.
Kingham, H.A. 5497.
Kimga, J. 8728.
Kimgan, A. 3501.
Kingsland, G.C. 1422.
Kingsley, P. 4943.
Kingsman, A.J. 6458.
Kingsman, S.M. 6458.
Kingsolver, C.H. 5666.
Kinner, N.E. 5300.
Kino, K. 3257.
Kino, T. 921.
Kinoshita, K. 1652, 6204.
Kinoshita, S. 1825, 3783, 5525, 8299.
Kinoshita, T. 9766.
Kinouchi, K. 1879.
Kinouchi, T. 2024, 8267.
Kinoth, A. 9930.
Kiene, R.E. 9119.
Kinsman, D.M. 5512.
Kintaka, K. 2461.
Kintner, L.D. 7884.
Kinzal, J.J. 34.
Kinzal, V. 307, 1108.
Kipner, H.G. 5865.
Kiprianova, E.A. 1645, 8895.
Kiral, Z. 411, 3948, 4107, 4108.
Kirby, B.D. 725.
Kirby, J.P. 5244.
Kirby, R. 5256.
Kirby, S.M. 6122.
Kirchhoff, J. 6883.
Kirchman, D. 1793.
Kirenskogo, L.V. 3943.
Kirkenko, G.A. 8464.
Kirino, O. 4300.
Kirk, B. 3612.
Kirst, P.W. 971.
Kirst, P.W.W. 5323.
Kirst, S.A. 6873, 7767.
Kirst, T.K. 3763, 3778, 5084, 7544.
Kirkland, J.J. 9190.
Kirkpatrick, T.L. 1285.
Kirkner, A.W. 6836.
Kirmaier, N. 5321.
Kirschner, K. 960, 1865, 1871.
Kirst, J.J. 8787.
Kiroso, B.H. 3746, 3812.
Kirst, H.A. 652, 3377, 6212.
Kisaki, T. 133, 3709, 3710, 3785, 6616.
Kiselev, A.V. 3688.
Kiseleva, S.M. 1952.
Kish, S. 8403.
Kishi, K. 5615.
Kishinevsky, B. 6306.
Kishor, K. 2476.
Kishore, N. 7933.
Kishor, R. 5751.
Kishore, R.L. 4598.
Kiss, A. 78.
Kissler, J.J. 5987.
Kistner, A. 9891.
Kistner, M. 4580.
Kit, V. 8694.
Kita, Y. 1882.
Kitagawa, M. 701.
Kitahara, M. 1658.
Kitahara, N. 7490.
Kitahara, E.W. 2098.
Kitahara, K. 2444.
Kitajima, M. 6449, 6451.
Kitamura, H. 9417.
Kitamura, K. 935.
Kitano, K. 1667.
Kitaura, K. 3334.
Kitasak, K. 6813.
Kitaura, Y. 919.
Kitazume, T. 9221.
Kitchen, B.J. 9819.
Kitchens, R.L. 8221.
Kito, M. 6625.
Kittaka, K. 6813.
Kittle, D.R. 5060.
Kittner, E. 4351, 5240, 7146.
Kizits, M.D. 3384.
Kivman, G.Ya. 6058.
Kiyosaki, T. 9203.
Kiyosawa, S. 2971.
Kiyoshima, K. 9712.
Kiyotani, K. 8260.
Kiyoto, S. 7451.
Kizuki, K. 42.
Kjellander, J. 6043.
Kjellqvist, U.A. 2707.
Kjoeller, A. 5889.
Kla, J.M. 6360.
Klaenhammer, T.R. 7172.
Klages, D. 3256.
Klages, U. 7308, 7370.
Klaic, B. 7441.
Klanova, K. 2744.
Klapwijk, A. 9063.
Klastersky, J. 3400, 6146.
Klausmaier, B. 3665.
Klayman, D. 3310.
Klavara, H. 3847.
Kleber, C.J. 9824.
Kleeberger, A. 5113.
Kleimola-Kujala, E. 8991.
Kiegerman, M.E. 5392.
Klei, H.E. 3104.
Klein, M.B. 9013.
Klein, H.P. 8216.
Klein, H.W. 1888.
Klein, J. 7217.
Klein, J.O. 6163.
Klein, R.E. 2339, 8581.
Klein, R.J. 7107.
Klein, R.S. 5213.
Klein, T.W. 9937.
Kiene, R.E. 2761, 3665, 4683.
Kieneke-Borchers, A. 1276, 1281.
Kienhemp, H. 8586.
Kienig, H. 4568.
Kienkauf, H. 36, 2442, 6206, 6494.
Kienmann, P.J. 7880.
Kiemedtsdon, L. 617.
Kiemert, Z. 3131, 3133, 5816.
Kiemper, R.M. 657.
Kiencke, S. 1984.
Klepe, K. 3620.

- Klerk, A.R. 2835.
Klesov, A.A. 99.
Klibanov, A.M. 7337, 8289.
Klibanov, M. 9169.
Kligerman, A. 5480.
Klimova, M. 4347.
Klimm, W. 8326.
Klimyuk, S.I. 2406.
Klimov, A.I. 3266.
Klimova, N.E. 7970, 8855.
Kline, D. 270.
Kline, P. 8712.
Klingenberg, P. 3701.
Klinger, I. 2034.
Klingmüller, W. 5110.
Klitsars, A.A. 9113.
Klipstein, F.A. 291, 2086.
Klisenko, G.A. 3518.
Klisiewicz, J.M. 1295, 9427.
Kliza, S. 2389, 7508.
Klopper, J.W. 3025, 3061.
Kloss, M. 592.
Klostermeyer, H. 4556, 7320.
Klubek, B. 2297.
Kluczewski, S.M. 4056.
Klunov, D. 784, 4679, 8290.
Klyosov, A.A. 3676, 4566, 6653.
Klyushnikova, T.M. 7527.
Knackmuss, W. 9109.
Knapp, D.B. 7366.
Knapp, E.B. 6966.
Knapp, J.S. 841, 7508.
Knapp, D.E. 1248, 7079.
Knecht, J. 51.
Kneifova, J. 7964.
Knight, C. 395.
Knight, C. 395.
Knight, M. 3345.
Knight, R.G. 9960.
Knight, V.H. 9441.
Knight, W.E. 335, 430, 2106, 7829, 7847, 8544.
Knight, W.G. 7020.
Kniel, Y.A. 3713, 4700.
Knier, K. 9170.
Knioche, H.W. 7618.
Knosel, D. 5528.
Knock, J.K. 1200, 4969, 4971.
Knorr, H. 5224.
Knorre, W.A. 716.
Knorr, H. 4348, 4372.
Knott-Hurtzinger, V. 86.
Knott, D.R. 453.
Knowles, C.J. 1043, 9982.
Knowles, J.R. 82, 83, 85, 87.
Knowles, J.W. 1733.
Knowles, N.R. 3062.
Knowles, R. 594, 5106.
Knox, K.W. 3711.
Knudsen, G.R. 3175.
Knudsen, J.G. 5444.
Ko, W.-H. 1213.
Ko, W.-H. 1213, 6566, 9551.
Ko, Y.T. 3655.
Koba, Y. 5569, 8703.
Kobayashi, D. 1633.
Kobayashi, G.S. 1633, 2811.
Kobayashi, H. 6521.
Kobayashi, J. 4437, 5442, 6288.
Kobayashi, K. 928, 4932.
Kobayashi, M. 1885.
Kobayashi, T. 1919, 1937, 1939, 2771, 5551, 6824, 7391, 7496, 8167.
Kobayashi, Y. H. 8328.
Kobe, J. 3342.
Kobel, H. 132, 8343.
Kobinata, K. 7288.
Koblova, L.V. 2664.
Koch, I. 3155.
Koch, R. 3023.
Koburger, J.A. 2941.
Kocari, J. 6637.
Koch, A.L. 3559.
Koch, E. 8543.
Koch, G.L.E. 6532.
Koch, H.U. 9035.
Koch, M. 4748.
Kocherginskaya, S.A. 1911.
Kochetkov, N.K. 3713, 4700, 8331.
Kochetov, G.A. 6425, 6551, 6555, 7353, 7355.
Kochmann, R.A. 379.
Kochi, H. 8842.
Kochibe, N. 6377.
Kochman, J.K. 5746, 6799, 6800, 7712.
Kochmanska, J. 939.
Kochukova-Kratichlova, A. 1036, 8150.
Kocun, J. 5609.
Kocor, M. 112, 977.
Kodaira, R. 5537.
Kodama, O. 5590, 6849.
Kodama, T. 123, 6573, 6619.
Kodama, Y. 4402.
Koehler, J. 2007.
Koehler, M. 2898.
Koehler, W. 8214.
Koeck, P.C. 4882.
Koeller, W. 500, 1414, 2279.
Koening, R. 390, 1757, 3071, 4037, 6792, 7707, 8588.
Koenig, S. 2037.
Koenig, W. 1732.
Koennecke, A. 3665.
Koerner, D. 3701, 5384.
Koers, D.A. 5302.
Koert, J.M. 2566.
Koester, M. 9923.
Koevics, G. 3920.
Koevics, Gy. 7657.
Koga, H. 6840, 9180.
Koga, M. 7367.
Koga, T. 9124.
Kogaska, R. 9847.
Kogekar, R.G. 2787.
Kohiyama, M. 912.
Kohl, D.H. 151, 3210.
Kohl, W. 8877.
Kohler, F. 5057.
Kohn, E.S. 7056, 8774.
Kohn, F.C. Jr. 4975.
Kohn, L.D. 4641.
Kohn, R. 9183.
Kohn, H. 6513.
Kohn, M. 4707, 6586, 8346.
Kohsaka, M. 921, 7451.
Kohde, G. 9815.
Kodis, P. 1080.
Koka, G. 5615.
Koike, J. 7161.
Koike, S. 706, 7115.
Koishi, H. 5615.
Kojima, K. 8365.
Kojima, A. 765.
Kojima, I. 1649, 1650, 9712.
Kojima, M. 3095, 4993, 6136, 6322, 9781.
Kojima, N. 158.
Kojima, T. 8582.
Kokkinnu, T. 8753.
Kokorev, V.S. 3518.
Kolaczowska, M.K. 7360.
Kolattukudy, P.E. 96, 500, 1414, 2279, 8241, 8245, 8563.
Kobzen, M.J. 499.
Kole, M. 4741.
Kolek, T. 8435.
Kolesnik, L.A. 1917.
Kolik, I.I. 3615.
Kolko, T.D. 2708.
Kollanyi, L. 2169.
Kollmann, A. 7444.
Kollmorgen, J.F. 3954.
Kollmorgen, K. 872.
Kolodkova, N.M. 2682.
Kolodova, O.M. 2504, 2596.
Kolot, F.B. 3077, 5530.
Kolotvinova, E.G. 3518.
Kolozyin-Krajewska, D. 4783.
Koltukova, N.V. 951.
Kolvin, J.I. 3835.
Komatagata, K. 4764, 7422, 8520.
Komaki, M. 8457.
Komano, T. 1581, 1582, 9775.
Komarov, E.V. 770, 1654, 2594, 2596, 5234, 5278, 6177, 6179, 6230, 6862, 8867, 8897.
Komarova, N.V. 24.
Komarskaya, T.P. 1593, 5415.
Komatsu, K.K. 3596.
Komatsu, T. 3398, 8838, 8839, 8840.
Komatsubara, S. 4580.
Komatsu, R. 2893.
Komoto, T. 4407.
Kominkova, B. 2663, 3597.
Komiyama, K. 6059.
Komiyama, Y. 4504.
Komolafe, O.O. 9660.
Komareva, N.V. 6551.
Konate, G. 4038, 8098.
Konda, Y. 1977.
Kondo, E. 3410, 4286, 6139.
Kondo, H. 4632.
Kondo, J.K. 5414.
Kondo, M. 1577, 3666, 7991.
Kondo, N. 4932.
Kondo, S. 1855, 2809, 3717, 4416, 4423, 6152, 6218, 6220, 6221, 7055, 7169, 9762.
Kondo, T. 7177.
Kondo, Y. 7177.
Konradova, T.F. 2395.
Konradova, T.P. 8336.
Koncny, J. 9159.
Kong, H.-L. 8421.
Konicek, J. 8134.
Konikova-Radachova, M. 8134.
Konigsberg, W.H. 6562.
Konings, W.N. 966.
Konishi, M. 8888, 8889.
Konishi, T. 2739.
Konno, K. 4907, 5211, 7450.
Konno, T. 7300.
Konno, M. 7035.
Kono, T. 8406.
Kono, Y. 6849.
Kononuk, E.A. 9554.
Konopka, E.A. 6129.
Konovalova, A.S. 4216.
Konstantinova, N.V. 1676, 5543.
Konstantinova, R. 1997.
Konstareva, K.Yu. 726.
Konihakamee, W. 683.
Konuma, H. 203, 9720.
Konuykhov, V.F. 7237.
Kool, H.J. 1105, 8519.
Kooner, B.S. 5806.
Koopman, B. 8064.
Koopman, J.P. 3546.
Koopman, J.S. 1709.
Kopeck, D.M. 4079.
Kopecek, J. 7913.
Kopczyn, J. 2793.
Kopke, J.A. 676.
Kopelovitch, E. 5773, 8590.
Kopel, H.B. 3493.
Kopp, M. 4038.
Kopperschlaeger, G. 1875, 6432.
Kopteva, A.E. 1055.
Kopteva, Zh.P. 151, 1055, 7846, 9626.
Koraem, A.I.M. 9703.
Korban, S.S. 7734.
Korak, R.F. 475.
Korchahina, N.I. 6568.
Kore, S.S. 2290.
Koren, S. 4311.
Korenaga, H. 2818.
Korepanova, E.A. 758.
Korhoia, M. 3806.
Korhonen, T.K. 5933, 8660, 9062.
Korhonen, M.J. 8874.
Kornacki, J.L. 1104, 4856.
Kornadt, C.U. 3544.
Kornkamaeng, P. 8585.
Korobkova, T.P. 2585, 6227, 6232.
Korobushkin, I.M. 7013.
Korobushkin, E.D. 7013.
Korolczuk, J. 8459.
Korolev, N.N. 1557.
Korolev, V.G. 1808.
Korolev, Yu.S. 7968.
Koroleva, O.V. 7364.
Korotkova, T.D. 2708.
Korsova, T.L. 7387.
Korth, H. 768.
Kortt, A.A. 6466.
Koryagina, P.I. 7034.
Kosalarman, V.R. 6884, 7611.
Kosolova, O.M. 2594, 2596.
Koseki, T. 8328.
Kosenko, L.V. 8126.
Koshchenko, K.A. 1948, 3688, 7433.
Koshchenko, K.A. 4697.
Koshiji, H. 4515, 7127.
Kosmaty, K. 7233.
Koshio, A. 4819.
Koshiy, A. 751.
Kosikowski, F.V. 4732, 4767, 8471.
Koske, R.E. 4187.
Koskenen, M. 8994.
Kosman, D.J. 4607.
Kosovskikh, V.L. 297.
Koss, J.C. 9945.
Kossen, N.W.F. 4261, 4737, 8213, 9241.
Kossak, R.M. 7853.
Kostka, S. 9513.
Kostroma, E.Yu. 2346.
Kosuge, T. 7689.
Kosun, N. 2424.
Kosunen, T.U. 9979.
Kotani, H. 7233.
Kotani, S. 3286.
Kotani, M. 7146.
Kotelev, V.V. 1899.
Kotenko, S.Ts. 1909.
Kotiadis, S.N. 869.
Kotlarz, D. 8433.
Kotlarska, P.J. 6159.
Kotlyar, J. 4478.
Kotlyar, A.N. 184.
Kott, Y. 5170.
Kotula, A.W. 5512.
Kotyk, A. 2710.
Kotze, J.M. 9324, 9568.
Kough, J. 6965.
Kouta, J. 1388.
Kouno, K. 1649, 7086.
Koupal, L.R. 4409, 4426.
Kourai, H. 1587.
Kourany, M. 2678.
Kouri, Y. 3382.
Kousoulas, K.G. 7943.
Kovackova, E. 5681, 7653.
Kovacs, G. 5826.
Kovacs, M. 2126.
Koval, E.Z. 2384, 7627.
Kovalenko, A.D. 1991, 9229.
Kovalenko, A.G. 2170.
Kovalenko, A.M. 623.
Kovalev, G.K. 2704.
Kovalev, V.N. 684, 1639.
Kovar, J. 6496.
Kovary, F. 2929.
Kovats, Z. 6663.
Kovrov, B.G. 3943.
Kowalczykova, A. 7322.
Kowald, R. 2604.
Kowalski, M. 4304.
Kowalski, M. 9616.
Kowalski, S. 534.
Kowalski, T. 4177, 6926, 9521.
Koyama, S. 701.
Koyama, Y. 4522, 6625.
Kozak, J. 3460, 3470.
Kozaki, M. 4565.
Kozaki, S. 9293.
Kozina, A.M. 1808.
Koziorowska, J. 4465.
Kozlova, L.A. 7793.
Kozlova, Yu.I. 2587.
Kozlovski, S. 5793.
Kozlov, A.V. 1183.
Kozuka, S. 5369.
Kozuki, S. 6139.
Kradolfer, F. 6129.
Kraev, V.G. 9374.
Kraft, J.M. 7753.
Kraemer, R.L. 447.
Kraemer, H. 8269.
Krake, L.R. 469, 3070, 5784, 6794.
Kraik, O. 2164, 2165.
Kraiva, B. 3570.
Kraiva, M. 7839.
Kraivova, E. 782, 5540, 8016.
Kramer, C.L. 3332, 9499.
Kramer, M. 7929.
Kramphanz, V. 3636.
Krantz, I. 7133.
Kranz, J. 1166, 4518, 6821, 6822, 8550, 8554, 8607, 9391.
Krasinikova, A.P. 1537.
Krasinikova, O.A. 7966.
Krasnec, L. 7116, 7954.
Krasnobyzh, N.Ya. 7643.
Kras, C.J. 5871.
Kratasyuk, G.A. 6479.
Kratasyuk, V. 6479.
Kratka, J. 3010, 7653.
Kratz, J. 7050.
Krauel, H.H. 2904.
Krauel, U. 2904.
Kraus, J.F. 4148.
Kras, N. 2389, 9157.
Krause, M. 2424.
Krauss, S. 7370.
Krausz, J.P. 9327.
Kravchenko, L.V. 551, 6694.
Kravchenko, N.A. 7052.
Kreischner, R. 5392.
Kreil, R.G. 6932.
Kregar, I. 5496.
Kreiling, R.L. 4460.
Kreparek, E.E. 9730.
Kreil, K. 1371.
Kremer, R.J. 1510, 5132, 7242.
Kress, P.A. 6002.
Kressdorff, B. 7217.
Krestyanova, I.N. 5521.
Kresze, G.-B. 52, 4669.
Kretovich, W.L. 8199.
Kretschmer, P.J. 1830.
Kretschmer, R. 5392.
Kretschmer, S. 3701.
Kreuter, T. 9109.
Kreutz, B. 7388.
Kreutz, M. 6343.
Krichewski, M.I. 893.
Kritsch, W.K.G. 6446.
Krikun, J. 1246, 1411, 3979, 4002, 5758, 6948, 7648, 9380.
Krilov, A.V. 2118.
Krnsha, R.N. 2341, 6947, 6949.
Krisnan, T. 1850, 7375.
Krisniansen, B. 6570.
Krisniansen, R. 786.
Krisnofferson, K. 3503.
Krivane, G. 9574.
Krivane, M. 2245.
Krivets, I.A. 9254, 9664.
Krivetskiy, D.A. 1448.
Krivoshin, Yu.S. 4296.
Kroeger, A. 51.
Kroetz, M.E. 7772.
Krogstad, D.J. 1566, 5157, 7920.
Krogslund, B. 5319.
Kroha, M. 4713, 7482.
Kronberg, F.G. 5649.
Kroner, K.H. 6337.
Kronlund, G.C. 426, 5006.
Kronwall, G. 846, 9744.
Krook, A. 6043.
Kropiewnicka, H. 5319.
Kropp, B.R. 529, 6912.
Kroskova, T.M. 770, 2594, 2596.
Krouwel, P.G. 4737, 9241.
Kruer, H. 7481.
Kruer, H. 7734.
Kruer, P.G. 3620.
Kruer, R.J. 2783.
Kruer, W. 495, 5846.
Kruetzfeldt, R. 5529.
Krug, T.A. 9250.
Kruher, H.J. 74.
Kruk, M. 269.
Krumm, G.W. 224.
Krumperman, P.H. 8728.
Krumphanzl, V. 3258, 8016, 8034, 8885, 9987.
Krunchak, V.G. 770, 1654, 2594, 2596, 8897.
Krup, M. 5326.
Krup, K. 3353.
Krupinsky, J.M. 2320, 4523, 8548.
Kruppa, J. 1752.
Krusch, V.U. 895.
Kryuchynski, S. 5793.
Krylov, A.V. 1183.
Krylova, N.I. 7468, 7487.
Kryuchkova, V.G. 6029.
Krywienicz, J. 4531.
Kuan, K.N. 6476.
Kubat, J. 3206, 7839.
Kubcek, C.P. 4510, 5511, 7423.
Kubicki, D. 9074.
Kubin, M. 2500, 3487.
Kubo, I. 8791.
Kubo, S. 2077.
Kubo, Y. 325.
Kubota, H. 4428, 8965.
Kubota, K. 774.
Kubovic, M. 5564.
Kuboyama, M. 175.
Kuc, J. 465, 1248, 2262, 3120.
Kuc, J.A. 3089.
Kucera, J. 3671.
Kucera, A. 5172.
Kucey, R.M.N. 553, 615, 3186.
Kucnerovich, F. 5100.
Kucsera, G. 6329, 6330.
Kudela, V. 3010, 5681.
Kudiel, A. 6210.
Kudina, M.K. 779.
Kudler, I.J. 2831.
Kudo, S. 1985.
Kuees, U. 7263.
Kuehn, H. 5166.
Kuehne, Ch. 3580.
Kuehne, H. 1984.
Kuehne, T. 3543.
Kuemmerle, H.P. 10001.
Kuemmerlin, R. 3374.
Kuenzel, W. 812.
Kug, J. 444.
Kugler, M. 780.
Kuhlman, E.G. 543, 2313, 2315, 86.
Kuhn, A. 7415.
Kuhn, C.W. 3927.
Kuijper, H.J. 2265.
Kuiper, E. 878.
Kukko, E.I. 8000.
Kuklin, V.V. 8120.
Kukuzinska, M.A. 6411, 6415.
Kula, M.-R. 6337, 6445, 7401.
Kulaev, I.S. 45, 7267, 8281.
Kulakovskaya, T.V. 45.
Kulbe, D.D. 6447.
Kulene, V.V. 28.
Kulick, J. 9490.
Kulik, M.M. 1143.
Kulinsk, D. 9584.
Kulis, Yu.Yu. 7342.
Kulkarni, R. 6163.
Kulkarni, V.N. 370, 468, 1161.
Kullmann, K.H. 3255.
Kulmanov, E.E. 5652.
Kulprecha, S. 1825.
Kulshreshtha, R.C. 3845.
Kulshreshtha, P. 9412.
Kulsky, L.A. 2462.
Kulyeva, V.V. 779.
Kumagai, H. 1944, 1900, 1915, 6513.
Kumagi, H. 6511.
Kumakura, M. 6499, 7262, 9064, 9676, 9981.
Kumano, K. 735.
Kumano, N. 7450.
Kumar Rao, J.V.D.K. 7821.
Kumar, A. 668.
Kumar, A.A. 2801.
Kumar, I. 5811.
Kumar, K.A. 5807.

- [illegible]

Author Index

-

- Maciorowski, A.F. 2602.
 Mack, D. 1752.
 Mack, H.J. 6983.
 MacKenzie, C.R. 2799, 5585.
 Mackenzie, I.A. 7687.
 Mackenzie, K.A. 4844.
 Mackenzie, K.A.D. 3208.
 Mackenzie, R. 4489.
 Mackey, B.M. 3574.
 Mackie, R.I. 9889.
 Mackinnon, G. 6389.
 Mackler, B. 952.
 Macko, V. 7629.
 Mackowiak, P.A. 1569, 1603, 3308.
 Macle, M. 2653, 3597.
 Macleod, T. 2464.
 MacLaren, D.M. 8137.
 Maclean, D.J. 2388.
 Macleod, A.J. 4772.
 MacLeod, R.A. 9026.
 MacMillan, J. 2853.
 Macmillan, J.D. 5227.
 MacNab, A.A. 4011.
 MacNamara, O.C. 5931.
 Macnish, G.C. 1331.
 MacPherson, E.A. 1531.
 MacRae, I.C. 7538, 8367.
 Macrae, B.J. 2772.
 Macrae, B.J. 7596.
 Madan, P. 4512.
 Madar, R. 8215.
 Madar, S. 5869.
 Madden, D.L. 9836, 9839.
 Madden, J.N. 1070, 4903.
 Madden, L.V. 4010, 4940, 4969, 4971, 6815.
 Maddens, K. 497.
 Maddox, I.S. 109, 4696, 4739, 6564, 8196, 8390.
 Mader, J.T. 5160.
 Mader, T.L. 254.
 Madhwa MacRastha, K. 2901.
 Madhusudan Rao, M. 3160.
 Madisen, L.J. 7557.
 Madon, J. 7334.
 Madron, F. 4731.
 Madry, N. 6206.
 Madson, A. 7823.
 Madsen, J.P. 5718, 9387.
 Maeda, H. 50, 152.
 Maeda, K. 1658.
 Maeda, Y. 4447, 5286, 5296.
 Maehlimann, M. 1607.
 Maehr, H. 2822.
 Maekinen, M.-L. 5206, 5207.
 Maeland, J.A. 2425.
 Maenhoudt, M. 6074.
 Maentele, W. 4554.
 Maentaalea, P. 930.
 Maes, B. 6247.
 Maes, F.P.S. 5155.
 Maestre, M.F. 6393.
 Maffei, H.M. 9522.
 Magae, Y. 8166.
 Magalhães Lopes, C.A. 8975.
 Magalhães, M. 7251.
 Magalhães, M.T. 7789.
 Magali de Araujo, J. 6638.
 Magarey, P. 4102.
 Magaribuchi, T. 7233.
 Magari, L.P. 1465.
 Magdoub, M.N.I. 7578.
 Magni, G. 9164.
 Magnus, C.A. 7516, 8408.
 Magu, M.L. 635.
 Magota, K. 4553.
 Magni, R. 3497.
 Magro, P. 946, 9443.
 Magu, S.P. 5974, 7799.
 Mahadevan, A. 593, 3784.
 Mahajan, S. 4857.
 Mahajan, R.K. 5812.
 Mahajan, V.K. 5812.
 Mahajan, V.M. 3336, 7928.
 Mahapatra, G.N. 4318.
 Mahato, S.B. 7067.
 Mahdy, F.M. 8446.
 Maher, E.A. 2235, 5033.
 Maheshwar, R.K. 9690.
 Mahesh, H.R. 932.
 Mahmood, K. 1436.
 Mahmood, A.M. 8749.
 Mahmood, M.M. 4732.
 Mahmood, S.A.Z. 1354, 9143.
 Mahmoodi, N. 5397.
 Mahmoudides, G. 2733.
 Mahon, J.D. 5951, 7852.
 Mahony, D.E. 759, 2705.
 Mahor, R. 3978.
 Mahor, H.I. 8734.
 Mahor, H.I. 8734.
 Madanov, V.V. 8869.
 Maier, B. 7953.
 Maier, E. 4608.
 Maier, P.P. 3646, 5531, 7590.
 Maier, W. 5545.
 Maier, W.J. 9286.
 Maiko, I.I. 2682.
 Main, C.E. 3050, 5063, 9395, 9396.
 Maiorella, B. 9237.
 Maiorella, B.L. 9803.
 Maiorova, V.N. 8830.
 Mair, M.S.R. 6588.
 Mashman, N.J. 4896.
 Mashment, C. 233.
 Matt, I.B. 8241.
 Matt, M. 7067.
 Matt, S. 2997.
 Majdanac, L. 1925.
 Majed, A. 1068.
 Majerus, P. 2937.
 Majewska, K. 8440.
 Majma, E. 3684.
 Major, D.J. 7861.
 Majori, L. 4341.
 Majtan, V. 300, 7156.
 Majumbar, S.K. 6847.
 Majumdar, S.K. 901, 2064.
 Mak, C.-P. 6214.
 Makae, S.Ch. 2184.
 Makarchuk, N.M. 9716.
 Makarekno, N.G. 8800.
 Makarenkova, R.V. 1597.
 Makhaialiani, V.V. 47.
 Maki, J.S. 808.
 Makin, T. 1892.
 Makinen, K.K. 956.
 Makinen, P.-L. 956.
 Makino, K. 3666, 4553.
 Makino, Y. 9011.
 Makkar, H.P.S. 5408, 7394, 9138, 9176.
 Makkouk, K.M. 1128, 6757, 7219.
 Makovcova, O. 2183.
 Maksimov, V.I. 7340.
 Maksimov, V.N. 6526.
 Maksimova, A. 1080.
 Maksimova, T.S. 779.
 Malajczuk, N. 517, 539, 4136, 4211, 5850, 5901, 6965, 8652.
 Malaki, T. 4486.
 Malamy, M.H. 8013.
 Malanchuk, J.L. 9621.
 Malaney, G.W. 7261.
 Malashenko, Yu.R. 767, 4265, 7870, 771, 9189.
 Malatrhakis, N.E. 6872, 6884.
 Malac-Mor, L. 1095.
 Malcolm, S. 8138.
 Malcovati, M. 6422.
 Malecka-Griggs, B. 9823.
 Maleeva, L.I. 2428.
 Malek, J.R. 3373.
 Malek, W. 9616.
 Malenecy, E. 2034.
 Males, B.M. 669.
 Maliszka, R. 146, 2733.
 Malewicz, B. 3351.
 Malhi, N.S. 2131.
 Malhi, S.S. 9624.
 Malicariakova, V. 2243.
 Maliki, K. 3532.
 Malige, B. 3944.
 Malik, M.A. 2335.
 Malik, R.K. 9242.
 Malik, V.S. 4698, 8857.
 Malik, Z. 698, 3269.
 Malikoides, C.O. 43.
 Malin, E.M. 5800.
 Malinowska, M. 6407.
 Malki, D. 8969, 9628.
 Malkomes, H.-P. 3249, 5975.
 Malkomes, H.P. 7012.
 Malkov, M.A. 6176.
 Malkova, I.V. 1819, 1676.
 Malik, M.A.B. 9670.
 Malikarjunanah, R.R. 5933.
 Malling Olsen, E. 4839.
 Malmberg, A.G. 3974.
 Malmberg, A.S. 1731.
 Malmstrom, B.G. 9148.
 Maloney, S.W. 8856.
 Malotte, R. 5254.
 Maloy, O.C. 6771.
 Matisev, S.D. 8331.
 Matiseva, N.N. 1958.
 Mali, F.-E. 6531.
 Mali, P. 7289.
 Malysheva, M.A. 7171.
 Mamat, H. 2111.
 Mamedov, M.K. 3521, 3533.
 Mammen, M.K. 3149.
 Mammierico, M. 4474.
 Mamonova, E. 1.6183.
 Mamula, D. 3082, 7866.
 Manabe, M. 3875, 4223.
 Manabe, Y. 1914, 2024.
 Manandhar, J.B. 7860.
 Manasbayeva, A.B. 8943.
 Manca de Nadra, M.C. 7336, 9161.
 Manappan, V. 7737.
 Manca, N. 4363.
 Manchanda, A.C. 166, 3677.
 Manchester, J.T. 3498.
 Mancon, C. 8816.
 Mandal, A.K. 853.
 Mandal, S.K. 9054.
 Mandel, L.J. 8854.
 Mandhan, K. 7851.
 Manganello, E. 7093.
 Mangano, C.A. 5865.
 Mangler, J.E. 5925.
 Mangunwiry, H. 5376.
 Manian, S. 372.
 Manibushanrao, K. 372.
 Maniotti, J. 1625.
 Manios, V. 4746.
 Manja, K.S. 3478, 9929.
 Manji, B.T. 5719, 5835.
 Manka, M. 8510.
 Manlapaz-Ramos, P. 1962.
 Mann, J. 7457, 8999.
 Mann, J.L. 8156.
 Mann, R. 1711, 2924.
 Mannens, D.J. 5953.
 Mannens, J.M. 2388.
 Manning, J.F., Jr. 1694.
 Manning, K. 6559.
 Manning, N.S. 5259.
 Manning, W.J. 591, 8414.
 Manoharachari, F. 470.
 Manoharan, R. 3056.
 Manor, D. 6067.
 Manon, I. 3115.
 Manrao, M.R. 8784.
 Manser, P.D. 7677.
 Mansfield, J.W. 2283.
 Mansoor, B. 1364.
 Mansour, A. 1247, 1317, 6793.
 Mansur, M.M. 1524.
 Mantel, C.R. 9677.
 Manten, A. 5161.
 Mantis, A. 1080.
 Mantle, P.G. 2071, 4896, 7506.
 Manwiler, A. 3880, 9291.
 Many, W.J., Jr. 3314.
 Many, J. 4486.
 Manz, J.T. 4590.
 Manzanal, M.B. 2820.
 Manzara, T. 9889.
 Manzano, S. 1975.
 Manzer, F.E. 1252, 3084.
 Mapelli, E. 7183.
 Mar, C.-C. 7111, 9689.
 Marcell, M.B. 2424.
 Marcovati, M. 6422.
 Maraku, S.I. 9874.
 Marambio, L. E. 208.
 Maramorosch, K. 9207.
 Maranhao Rios, E. 6638.
 Marasas, W.F.O. 5873.
 Maratea, D. 7192.
 Marathe, S. 3069.
 Maraulia, M. 9452.
 Marazzani, S. 9732.
 Marbach, I. 8298.
 Marburg, S. 8050.
 Marca, G. 8040, 9669.
 Marcar, K. 3532.
 Marcella, K.L. 9849.
 Marchal, S. 6292.
 Marchant, R. 15, 8489.
 Marchello, J.A. 265, 272.
 Marchenkova, A.I. 7338.
 Marchessau, P. 3497.
 Marchetti, M.A. 3017, 5039, 5711.
 Marchionni, G. 5472.
 Marchisio, V.F. 1276.
 Marchlewicz, B.A. 4916, 7634.
 Marchwicki, R.H. 9852.
 Marciano, P. 846, 9443.
 Marciniak, G.P. 7401.
 Marco, M.G. 456, 6878.
 Marcolin, M. 1606.
 Marcos, A. 5803.
 Marcus, R. 9378.
 Marcussen, H.W. 6041.
 Marcin, G. 194.
 March, P.A. 6326.
 Marek, T.H. 5254.
 Maresca, B. 1015.
 Margalit, J. 3721.
 Margalith, E. 3271, 5208.
 Margalith, M. 6067.
 Margalith, P. 5573, 7531, 8403.
 Margarian, A.A. 7688.
 Margaris, A. 1988, 3748, 8323, 8410.
 Margheri, G. 7612.
 Marglietti, A.M. 6354.
 Margolin, P. 8781.
 Margolin, W. 7481.
 Margot, P.A. 5604.
 Margutti, M.E.B. 6344.
 Marhwa, T.S. 5948.
 Maran, M. 8033.
 Marinevsky, I.D. 6174.
 Mariat, F. 1782.
 Marien, G.J.R. 3409.
 Marier, R.L. 5199.
 Marinhart, J. 5570, 7423.
 Marin-Sanchez, J.P. 1192.
 Marin, A. 5516.
 Marini, G. 1395.
 Marincea, F. 5380.
 Maring, C.J. 6185.
 Marini, E. 6096.
 Marino, A.A. 3071.
 Marnova, R. 304, 7034.
 Marotti, F. 1511.
 Marotto, P.R. 2291.
 Mariscal Larubia, A. 4278.
 Marjai, E. 6663.
 Markelova, A.M. 6105.
 Markelova, L.S. 7148.
 Markham, P.G. 3046.
 Markkanen, T. 5206, 5207.
 Markovic, O. 8251, 9183.
 Markowitz, N. 3393.
 Marks, G.C. 8653, 8654.
 Marks, M.I. 727, 5187, 7981.
 Marks, P.L. 4711.
 Markwell, J.P. 6427.
 Mariatti, R.B. 9376.
 Marling-Cason, M. 1603.
 Marmet, D. 7434.
 Manohar, F. 470.
 Marois, J.J. 1390, 4212, 5898.
 Maron, D.M. 9893.
 Maronek, D.M. 6971, 9541.
 Marose, B.H. 5753.
 Maroto Vela, M.C. 4278.
 Marcousky, J.L. 1326.
 Marples, R.R. 3292, 8073.
 Marrie, T.J. 3492.
 Marner, J. 4343.
 Marriott, M.S. 7936.
 Marriott, A. 1511.
 Mars, R.H. 803.
 Marschke, C.K. 6435.
 Marsden, W.L. 8312, 9073, 9152.
 Marsella, D. 8983.
 Marsh, L.M. 366.
 Marsh, P.B. 1320, 5579, 6360.
 Marsh, P.D. 4497.
 Marsh, K.C. 6013.
 Marshall, J.G. 7626.
 Marshall, R.T. 218, 808, 819, 4793, 5516.
 Marshall, W.M. 2914, 7587.
 Marsill, L. 2561, 4390, 5260.
 Marsot, P. 7162.
 Marte, M. 9400.
 Martel, A. 8271.
 Martel, P. 8705.
 Martelli, G.P. 315, 4018, 4027, 4035, 5760.
 Martell, T. 5782.
 Martens, D.W. 6857.
 Martens, L. 4843.
 Martens, R. 575, 2875.
 Martensen, A.N. 1171, 6860.
 Marti, E.H. 280, 281, 282, 283, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.
 Martinevsky, I.D. 1787.
 Martinez Garcia, J.P. 7914.
 Martinez Gernes, P. 7914.
 Martinez Gernes, P. 3558.
 Martinez-Gonzalez, J.M.S. 3125.
 Martinez-Quessada, J. 7182.
 Martinez-Rossi, N.M. 5151.
 Martnez, C.G. 2393.
 Martinez, E.M. 5029.
 Martinez, E. 5517.
 Martinez, J.L. 6235.
 Martinez, J.P. 3558.
 Martinezbrocal, A. 9976.
 Martini, N. 9732.
 Martinot, M. 8496.
 Martinova, R.V. 2095.
 Martins, M.J.R. 6689.
 Mastley, F.G. 3571, 8460, 8461, 8462.
 Marton, K. 7051.
 Martouret, D. 8353.
 Martucci, E.T. 4323.
 Martyn, R.D. 4010, 5774.
 Martyn, R.F. 5360.
 Maruca, S.D. 6302.
 Marucci, P.E. 6831.
 Marumo, S. 8382.
 Marumoto, T. 2339, 2340.
 Marupov, R.M. 6653.
 Maruyama, M. 3834.
 Maruthi Mohan, P. 7906.
 Maruyama, H.B. 2538, 2743, 3397, 6200, 9248.
 Maruyama, K. 6480.
 Maruyama, Y. 6520.
 Marwaha, S.S. 8388.
 Marwaha, T. 9370, 8677.
 Marx, C. 7825.
 Marx, D.H. 2302.
 Marxsen, J. 3485.
 Marymont, J.V. 713.
 Marziano, T. 7774.
 Marzulli, F. 8227.
 Masako, A.A. 4215.
 Masaba, D.M. 479.
 Mascagni, P. 7618.
 Mashail, S.F. 3948.
 Mashaly, M. 4294.
 Mashaly, R. 4294.
 Mashlova, G.M. 3450, 3456.
 Mashino, P.A. 9906.
 Mashkovsky, N.N. 9374.
 Mashi, K.N. 9990.
 Maskell, J. 4356.
 Maskell, W.J. 4484.
 Maslova, L. 2887, 2959.
 Mason, P.A. 5857.
 Massa, S. 7082.
 Massalski, P.R. 3960.
 Masschelein, C.A. 2859.
 Masugi, T. 8829.
 Massey, V. 6502.
 Masson, J.M. 7134.
 Masson, M. 8271.
 Mastro, S. 6132.
 Mastrosi, P. 1573, 6064, 7098, 7099.
 Masuda, H. 7505, 8457.
 Masuda, N. 958, 2892.
 Masuda, N.I. 2776.
 Masuda, S. 9040.
 Masuda, T. 2199, 9778.
 Masugi, T. 8842.
 Masuma, R. 1646.
 Matches, J.R. 5420, 6671.
 Mate, G. 2844.
 Mate, J. 782.
 Matelova, V. 1617.
 Matern, U. 5763, 5767.
 Mates, A. 8856, 9719.
 Mathai, G. 3148.
 Mathaka, H.D. 6290.
 Matheny, T.A. 6993.
 Matheson, D. 1286.
 Matheson Buchanan, A. 3609.
 Mathew, J. 4016, 4023.
 Mathews, J.F. 8448.
 Mathewson, J.J. 3278, 9636, 9903.
 Mathison, G.E. 4796, 9733.
 Mathlouthi, M. 237.
 Mathre, D.E. 7747.
 Mathur, A. 1507.
 Mathur, K.B. 4315.
 Mathur, N.B. 2396.
 Mathur, N.S. 7799.
 Mathur, S. 4064, 7313, 7314.
 Mathur, S.N. 1507.
 Mathur, S.P. 8705, 8708.
 Mathin, A. 667.
 Matkovics, B. 8033.
 Matossian, M.K. 1074.
 Matoselyukh, B.P. 9716.
 Matson, R.S. 8840.
 Matsumura, H. 4558, 8274, 9772.
 Matsubara, N. 7144.

- Matsubara, T. 916.
Matsuda, A. 5213, 9017.
Matsuda, K. 928, 1950, 7435.
Matsuda, N. 8457.
Matsuda, Y. 1658.
Matsue, M. 3684.
Matsu, C. 4989.
Matsu, E. 4246, 9609.
Matsu, H. 122.
Matsu, I. 1967.
Matsu, Y. 6515.
Matsuki, H. 8347.
Matsukura, S. 1561.
Matsumoto, H. 1918.
Matsumoto, J. 1515, 8056.
Matsumoto, J.I. 585.
Matsumoto, K. 3410, 6139, 8888, 8889.
Matsumoto, N. 1045, 8457.
Matsumoto, T. 3286, 3654, 4724, 4907, 9046.
Matsumura, M. 4338, 4437, 5442, 5551, 6288.
Matsumura, S. 5164.
Matsumura, Y. 3652.
Matsunaga, T. 1979, 3584.
Matsunaga, R. 1944, 5315.
Matsuo, N. 3755.
Matsuo, Y. 8260, 9034.
Matsuoka, H. 5569.
Matsuoka, S. 2258.
Matsuoka, S. 8456.
Matsushita, K. 955, 1828, 3683, 4604.
Matsushita, Y. 9203.
Matsutani, T. 857.
Matsuura, H. 232.
Matsuura, S. 3875, 8777.
Matsuura, Y. 1353, 4594.
Matsuyoshi, T. 3647.
Matsuzaka, N. 1115.
Matsuzaki, M. 7371.
Matsuzawa, H. 6478, 6514.
Matsuzawa, N. 26.
Matsuzawa, Y. 5538, 5539.
Matia, K.L. 8252.
Matiaush, R. 3833.
Matteau, P.P. 3791.
Mattoni, J.A. 3171.
Mattoni, M. 3306.
Matthee, F.N. 9568.
Matthes, R. 9070.
Matthies, C.R. 4590.
Matthies, G.A. 992.
Matthies, H.R. 1903.
Matthies, W. 2400, 2426.
Matthies, T.R. 5217.
Matthysse, A.G. 2977.
Mattias, M. 709.
Matthiasson, B. 137, 1737, 2856, 5286, 6227.
Matthe, H. 6100, 7061.
Mattina, R. 4364.
Mattingly, J.A. 7241.
Mattoes, L.T. 6261.
Matveenko, S.A. 1584.
Matveenko, V.M. 980.
Matyasova, I. 3460, 3470.
Matyshevskaya, M. 3900.
Matyshevskaya, M.S. 2682.
Maude, R.B. 508, 1229, 1519, 2220.
Maughan, R.D. 8537.
Maule, A.J. 1389, 6299.
Maun, C.M. 9236.
Maunuksele, E. 5206, 5207.
Maurer, A. 8092.
Maurer, P. 4592.
Maurice, D. 7. 3882.
Maurice, B. 4396, 4387.
Maury, C. 2484.
Maury, F. 9646.
Maurya, M.S. 3478.
Mavelli, I. 6470.
Mavrin, D. S. 5203.
Mavrin, S. 5352.
Mavridis, I.M. 2791.
Mavrommati, C. 4766.
Mavzytova, I.P. 9800.
Maxcy, R.B. 202, 2025, 4792, 9048.
Maximenko, L.V. 6688.
Maximova, E.A. 6088, 2563, 2564, 6183.
Maximova, N.P. 2701.
Maximova, T.S. 2588, 5543, 7992.
May, J.T. 7227.
May, J.W. 7029.
May, M.E. 5140, 5990.
May, R. 7938.
May, S.N. 3235.
May, S.O. 2041.
May, S.W. 9145.
Mayama, S. 1353, 3912, 6840.
Mayaudon, J. 5926, 5928, 9133.
Mayaux, F. 953.
Mayberry, W.R. 5482.
Mayee, C.D. 1238.
Mayer, A.M. 8298.
Mayer, B. 8772.
Mayer, R. 4782.
Mayer, R.C. 8961.
Mayer, R.J. 4956.
Mayer, V.W. 4510.
Mayes, J.J. 9274.
Mayfield, C.I. 1494.
Mayhew, D.E. 1294.
Maynard, D.G. 6996.
Maynard, J.E. 5367, 5486.
Maynard, M.A. 2878, 5779, 7701.
May, U. 39, 8278.
Maysinger, D. 9289.
Mazalova, M. 3656.
Mazars, C. 9346.
Mazid, M.A. 7361.
Mazoyer, M.A. 9737.
Mazoyer, M.A. 9886.
Mazurenko, G.A. 7957.
Mazza, G. 2815, 7246.
Mazza, L.A. 7608.
Mazza, M. 2473, 3340, 9678.
Mazzaracchio, R. 9684.
Mazzei, T. 6186, 6187.
Mazzei, T. 6126.
Mazzone, G. 2474.
Mazzotta, D. 2478, 6875.
Mazzocchi, U. 1225, 3064.
McAllister, C.K. 9656.
McCabe, W.R. 6163.
McCain, A.H. 831, 1262, 1294.
McCain, J.W. 423, 6765.
McCaill, D.R. 5021.
McCaill, R.F. 688.
McCardell, B.A. 1070, 4903.
McCardell, B.E. 5021.
McCarte, S.M. 1297, 5385, 5822, 6310.
McCarthy, C.M. 8114.
McCarthy, D.H. 8925.
McCarthy, M.A. 7202.
McCarthy, T.J. 4319.
McCarthy, W.J. 8104.
McCarty, I.E. 262.
McCarty, P.L. 5136, 5290, 5291.
McCaskey, T.A. 4801, 6244.
McCawley, P. 2807.
McChesney, J.D. 7458.
McClary, D.O. 8320.
McClatchey, K.D. 9727, 9909.
McClatchy, K.J. 9933.
McClaghty, C.A. 526, 6901.
McClasky, J.A. 7298.
McClung, C.R. 6987, 7856.
McColl, J.G. 4241, 9077.
McCollum, W.H. 8052.
McConnell, S. 1092.
McCool, P.M. 7811.
McConkindele, N.J. 8378.
McCormack, W.J. 9961.
McCormick, J.B. 3540.
McCormick, K.E. 9705.
McCormick, L.H. 555.
McCorquodale, R.M. 6270.
McCoy, C.W. 1003.
McCoy, R.E. 1206, 4945, 5859, 7678.
McCoy, W.F. 5316.
McCracken, L.D. 6572, 9236.
McCrae, S.T. 2767, 6401.
McCreary, J.J. 1696.
McCreight, J.D. 8189.
McCullough, W.G. 1848, 2847.
McDaniel, M.C. 4948.
McDaniel, M.E. 8616.
McDermott, K.T. 6260.
McDermott, L.M. 5177.
McDonald, A. 1724.
McDonald, C.R. 7603.
McDonald, D. 4083, 5679, 5683, 9475, Mead, G.C. 6686.
McDonald, D.R. 5407.
McDonald, G.I. 1452.
McDonald, K.O. 9642.
McDonald, P. 2531, 5629.
McDonald, R.C. 8958.
McDonald, R.J. 4916.
McDonald, S.O. 7020.
McDonnell, R.W. 3273.
McDonough, F.E. 7600.
McDonough, J.P. 932.
McDonough, M.W. 5476.
McDougal, L.K. 3475.
McDowell, T.D. 5239, 7135.
McElanay, J. 8956.
McElroy, L.J. 3464.
McEntegart, M.G. 3583.
McEwan, R.J. 1454.
McFadden, A. 1889.
McFadden, B.A. 5409.
McFarlane, J.C. 6952.
McFaul, S.J. 460.
McFerran, J. 5043.
McFerrers, G.A. 3569, 3587.
McGahren, W.J. 4400, 5265.
McGann, R.L. 4153.
McGaughy, W.H. 7495, 8351.
McGeary, F.M. 3049.
McGee, E.E.M. 3170.
McGettigan, S. 8392.
McGhee, J.E. 135.
McGinity, J.T. 7884.
McGinnis, J.A. 8466.
McGinnis, M.R. 692, 3493.
McGlashan, J.E. 9096.
McGlothin, N. 1223.
McGregor, A. 8759.
McGregor, A.N. 5567.
McGregor, M.C. 2529.
McGrew, J.R. 5026.
McGuffey, R.K. 7601.
McGuinness, E.T. 62.
McGuire, J.M. 1127, 1233, 4984, 4988.
McGuire, T.C. 6379.
McGuirt, P.V. 3366.
McHale, A. 31.
McHugh, G.L. 3594.
McHugh, R. 4461.
McKee, L.S. 3866.
McKlnnes, P.M. 8077.
McIntosh, A.H. 8632.
McIvor, R.S. 9141, 9142.
McKay, L.L. 5414, 9047.
McKee, A.S. 4497.
McKell, J. 7907.
McKellar, R.C. 8310.
McKenzie, D. 6203.
McKenzie, E.H.C. 2129.
McKercher, P. 790.
McKercher, P.D. 4767.
McKercher, R.B. 5915.
McKernan, P.A. 5212, 8797.
McKillop, E. 6115.
McKinley, V.L. 1995, 2023, 3509.
McKinnon, C.H. 2913, 4812, 5350.
McLaren, C. 9653.
McLaren, V.N. 7635.
McLaughlin, J. 8824.
McLaughlin, M.R. 5689.
McLaughlin, R.E. 6597, 9204.
McLaughlin, R.J. 4010, 5774.
McLean, G.D. 2980, 4985.
McLeod, J.M. 7740.
McLeod, P.J. 7484.
McLumans, C.A. 836, 9947.
McLundin, J. 72.
McMeans, J.L. 3871.
McMeekin, T.A. 3514.
McMillan, B.D. 2114.
McMillen, J.K. 1765.
McMillan, W.W. 5653, 6703.
McMorrin, J.P. 5016, 5740.
McMullen, M.P. 3184.
McMullen, W. 8935.
McMurry, L.F. 4631.
McMurry, L.M. 1635, 9767.
McMurray, E.J. III 7570.
McNabb, D.H. 9513.
McNabb, H.S., Jr. 5851.
McNamara, D. 4531.
McNamara, W. 7578.
McNaught, R. 7789.
McNaughton, S.J. 1484.
McNeal, B.L. 3013.
McNee, S.G. 7210.
McNew, R.W. 6992.
McPhee, W.J. 9639.
McQueen, R.E. 248.
McRitchie, A.C. 8378.
McShane, M.S. 6776.
McSorle, R. 9376.
McSorley, C. 8099.
McSweeney, G. 784.
Mey, D.V. 3124.
Mead, M.C. 6686.
Mead, M.A. 5074.
Meadow, N.D. 6411, 6413, 6417.
Meah, B. 358.
Meard, M. 2420.
Meares, A.A. 639, 7383.
Mederick, F.M. 7691.
Mederski-Samoraj, B.D. 6027.
Medhekar, S.D. 5205.
Medina, A.L. 198.
Medina, E. 2372.
Medoff, G. 1833, 2811.
Medronho, R.A. 7198.
Medve, R.J. 6969.
Mee, B.J. 681, 1693, 7872.
Meenan, R.E. 7220.
Meek, A.H. 3284.
Meek, D.J. 3860.
Meers, P. 497, 2209.
Meevooits, V. 3795.
Megalia, S.E. 299.
Megathanan, R. 6628.
Megeera, I.V. 7921, 7923, 9700.
Mehtar, F. 5816.
Mehtar, F.F. 3131, 3133.
Mehlman, I.J. 177.
Mehrotra, R.S. 1324, 7455, 7651, 7755.
Mehta, A.M. 6207, 9776.
Mehta, A.P. 9627.
Mehta, B.K. 7909.
Mehta, P.P. 3826.
Mehta, R.J. 4308.
Mehta, S.S. 1098.
Meier-Dinkel, A. 4037.
Meiguoz, R. 5024.
Meijer, J.W. 2349.
Meiklajohn, G. 3361.
Meile, L. 1908.
Meiners, M. 5563, 9239.
Meingast, G.J. 7930.
Messch, M.V. 6601.
Messner, A. 3185.
Messch, G. 128.
Mettert, E. 6238.
Mettert, E. 6238.
Mezeraite, M.V. 7342.
Mezender, A. 7066.
Melching, J.S. 383, 2130, 5666.
Melconian, A.K. 2963.
Melegan, M. 2436, 7083.
Melero-Vara, J.M. 1418.
Melvor, R.S. 9141, 9142.
Melksetian, V.S. 7486, 8349.
Melillo, J.M. 526, 6895, 6901, 6902.
Melin, J. 784.
Mellius, P. 6476.
Mellbring, D. 6203.
Mellergaard, S. 6530.
Melles, C.E.A. 717.
Melling, J. 5337.
Mello, A.F. 8990.
Mello, S.S. 2258.
Mellon, J.E. 1351.
Mellon, M.T. 3498.
Mellmed, L.N. 3568.
Melnick, J.L. 2655.
Melnikov, V.N. 7635.
Melnikova, V.A. 5415.
Melo Reis, E. 4526.
Meloche, H.P. 6434.
Meloche, J.D. 4257.
Meloche, R.B. 3998.
Mello, P. 1721.
Melouk, H.A. 341, 5047, 6743.
Melton, C.C. 228.
Melumad, D. 5208.
Memon, H.G. 6956.
Menard, M. 7131.
Menavde, D. 2119.
Mencib, J.F. 4432.
Mendelovitch, S. 8809.
Mendeslova, A. 8943.
Mendez-Castro, F.A. 3548.
Mendez, E. 114.
Mendicino, J. 4631.
Mendoza, M. 5029.
Mendoza, S. 7574.
Menegus, M.A. 9844.
Menge, J.A. 622, 2331, 4197, 4209, 5867, 7804, 7811, 9540.
Mengel, D. 6986.
Mennigh, D. 7703.
Mennier, M. 3439.
Menninger, J.P. 1630.
Menon, I.A. 428.
Menon, K.K.R. 8363.
Menon, N.N. 3148, 4022.
Menozzi, M.G. 7053.
Menzies, D.R. 9484.
Mephram, P. 7576.
Mercantini, R. 8983.
Mercer, E.I. 4117.
Mercer, P.C. 6873, 7767.
Merchant, F.J. 8410.
Merchant, R. 8323.
Mercier, M. 9402.
Meredit, C.P. 4131.
Meredit, D.M. 3357.
Merendino, R. 1573.
Merendino, R. 7098, 9693.
Merick, R. 9473.
Merino, C. 5632.
Merisko, E.M. 884.
Merkal, R.S. 1848, 2847.
Merle, G. 8117.
Merrell, B.R. 6262.
Merriam, D.C. 3084.
Merriam, T.L. 2834, 6060, 7461.
Merrick, R.L. 3741.
Merrill, W. 1462, 9520.
Merriam, P.R. 1514, 4919.
Merson, M.H. 4847.
Mertens, P. 5080.
Mertso, J. 5154.
Mes-Hartree, M. 2018, 4727.
Messallam, A. 4885.
Meshcheryakov, A.A. 1386.
Meshram, U.S. 4232, 4233.
Mesrob, B.K. 5522.
Messer, J.W. 215.
Messer, W. 1844.
Messing, R.A. 4619.
Messinger, R. 5869.
Messner, K. 3865.
Mesthazy, A. 1361, 4072.
Metcal, B.J. 2295.
Metcal, T.G. 2655.
Metthner, H. 7532.
Metitski, L.V. 2280.
Metivalli, N.H. 3823.
Metz, S.G. 1435.
Metzger, K. 1642.
Metzger, M. 6107.
Metzler, B. 1284.
Meulemans, M. 5078, 5080.
Meurant, F. 3877.
Mevarich, 5783.
Mew, T.W. 352, 1195, 1433, 9364, 9459.
Meyer, C.M. 19.
Meyer, H.D. 9971.
Meyer, H.K. 8589.
Meyer, I. 325.
Meyer, J.F. 7899.
Meyer, L.C. 5287.
Meyer, M. 8907.
Meyer, M.M. 522.
Meyer, W.A. 2241.
Meyers, E. 7179.
Meyers, S.P. 4782.
Meyrick, K.F. 2381, 3182.
Mezensky, L. 4503.
Mezentseva, L.M. 1444.
Mezes, S.F. 948.
Miezhevkin, V.Y. 891, 8372.
Mezmar, I. 1719.
Mhalu, F.S. 3407.
Mheen, T.-I. 2766.
Mheen, T.I. 2802.
Mia, A.S. 9850.
Micalizio, S. 4398.
Mickar, V.V. 784.
Micolucci, M. 3497.
Michaels, A.S. 7513.
Michal, S. 3986, 3988, 3995.
Michalak, T. 3525.
Michalski, R.S. 4942.
Michalski, R.S. 3693.
Michal, G. 7576.
Michel, G. 3414, 6576.
Michel, J. 3300, 6099.
Michel, J.F. 5035.
Michel, M.F. 5205, 7033.
Michele, J. 7213.
Michele, G. 656.
Michell, M.R. 1594.
Michele, R.W. 404, 3091, 6820.
Michon, F. 6577.
Michumna, L.R. 1449.
Middleton, W. 784.
Middlethoven, W. 1065.
Middlebrooks, E.J. 5331.
Middleton, R.F. 7989.
Midland, S.L. 2471.
Midema, F. 4430.
Midziak, I. 839.
Mielczak, H. 2556.
Mielke, H. 1394.
Mielke, M.E. 5865.
Miernik, J. 9490.
Miersch, J. 5461.
Miethe, H. 8164.
Miettenin, J. 5206, 5207.
Mietz, J.A. 9645.
Mifflin, B.J. 5939, 6467, 6985.
Mignone, I. 7442, 8330.
Mignone, C.F. 7608.
Mignucci, J.S. 5059.
Mik, M. 15.
Mihalcsuk, P. 2657.
Mihaluc, F. 7147.
Mikami, H. 735.
Mikami, Y. 133, 2830, 3709, 3710, 3785, 6616, 6617, 8437, 8438.
Mikawa, M. 2091.
Mikaylov, D.F. 3200.
Mikeldade, G.G. 9108.
Mikesell, P. 2085.
Mikhalov, A.M. 6551.
Mikhalova, L.N. 2725.
Mikhalova, D.C. 8867.
Mikhalova, R.V. 1866.
Mikhalchuk, M.V. 1545.
Mikhalova, N.I. 8294.
Mikhasko, T.F. 7921, 9700.
Miki, K. 964.
Miklos, S. 8603.
Miko, M. 7156.
Mikolajcik, E.M. 8484.
Mikulik, K. 1832.
Mikusova, A. 2178, 2245.
Mikyska, A. 7518.
Miklavovic, Z. 2350.

Author Index

- Mueller, H.-M. 5625, 5626, 5643, 6746.
 Mueller, H.E. 3617
 Mueller, J.-C. 6193
 Mueller, J.P. 1253
 Mueller, K.D. 36
 Mueller, K.M. 3328
 Mueller, M.M. 5972
 Mueller, P.J. 3439, 8003, 8037, 8038
 Mueller, R. 6285
 Mueller, U. 3477, 4768
 Muendel, H.H. 5129
 Muessig, J. 4563
 Muezzawa, H. 6152
 Mugo, P. 5506, 9024
 Muhammad, N. 7081
 Muhler, J.C. 9824
 Muir, A.D. 687
 Muir, D.D. 8499
 Muir, W.E. 8900
 Muehl, L.F. 5833, 8569
 Mukai, T. 7169
 Mukasa, H. 55, 7711
 Mukerjee, K. 7471
 Mukerji, G.K. 7757
 Mukhopadhyay, A.K. 7539
 Mukhopadhyay, D. 9054
 Mukhopadhyay, S.N. 9249
 Mukkur, T.K.S. 7249
 Mulas, P. 1712
 Mulcahy, L.T. 1688
 Mulcahy, P.F. 8384
 Mulder, R.W.A.W. 4786, 4881
 Mulder, S.J. 4879
 Mulheim, L.J. 3143
 Mulla, M.S. 1030
 Mullaly, R.L. 9913, 9917
 Muller, W.M.A. 5482
 Mullaney, E.J. 4058
 Mullen, R.J. 9383
 Muller, B.W. 9750
 Muller, I. 7049
 Muller, L. 7333
 Muller, L. 2584
 Mulligan, J.T. 7481
 Mulligan, M.E. 8787
 Munas, C.A. 9491
 Munakata, T. 8347
 Munasinghe, H.L. 1514
 Munawar, H. 8908
 Munch, J.C. 6959
 Munday, R. 274
 Mundie, C.M. 1474
 Mundry, K.W. 6805
 Munro, B.P. 8508
 Mundy, G.R. 4896
 Munevar, F. 6940
 Mungur, R. 7699
 Munier-Lamy, C. 7014
 Muniyappa, V. 446, 4946
 Munk, L. 2126
 Munneke, D.E. 499
 Munneke, D.M. 8416
 Munno, I. 8478
 Munns, D.N. 598, 4230
 Munoz, O.H. 2393
 Munro, A.J. 160
 Munro, D. 6812, 8528
 Munro, M.H.G. 688, 1622
 Munro, P.A. 9983, 9984
 Munro, R. 3383
 Munsch, M.H. 5613
 Munshi, G.D. 5688, 7764
 Muntau, V. 7130
 Muogbo, E.N. 234
 Muona, O. 451
 Muorachi, T. 2079
 Murai, S. 302
 Murakami, A. 1666, 9759
 Murakami, H. 11
 Murakami, K. 6521
 Muraki, H. 7505
 Murakoshi, S. 9774
 Muralidharan, K. 1169
 Muramatsu, I. 8684
 Muramatsu, S. 9900, 9792
 Murañ, A.F. 464, 2979
 Murañ, S. 923, 2735, 3692, 3699, 6689, 6387, 6515, 6523, 7306, 8383
 Muroka, H. 6371, 8197
 Muroka, T. 1814
 Muroka, Y. 4399
 Murata, A. 1577
 Murata, K. 118
 Murata, T. 6097
 Murayayeva, S.A. 7071
 Murayayeva, V.A. 5366
 Murayayeva, I. 1640
 Murayama, S. 1474
 Murchio, P.O. 6914
 Murdoch, C.W. 2323, 8657
 Murdoch, A.L. 72
 Mureña, N.K. 5906, 8669
 Murofushi, N. 968
 Murofushi, V.J. 4693, 7332
 Murphy, A.M. 8158
 Murphy, F.D. 1710
 Murphy, J.A. 7145
 Murphy, J.F. 4740
 Murphy, K.C. 7399
 Murphy, P. 5263
 Murphy, P.J. 3028
 Murphy, R. 6533
 Murr, L.E. 9627
 Murray, A.E. 8390
 Murray, B.E. 3278, 6024, 6027, 6028, 6029, 6030
 Murray, B.K. 5212, 8797
 Murray, C. 7138
 Murray, D.I.L. 2132, 4153
 Murray, J.J. 9357
 Murray, P. 9655
 Murray, P.R. 5157, 9924, 9930
 Murray, R.G.E. 4257
 Murray, T.D. 4087, 8451
 Murray, W.D. 5574, 5575, 8441
 Murrell, J.C. 6400
 Murrell, W.G. 5417
 Murthy, K.V. 3281, 8730
 Murthy, P.S. 6430
 Murthy, V.S. 4622
 Murty, G.S.R.K. 7840
 Murty, A.S. 8704
 Murty, M.G. 9590
 Murygin, V.G. 7342
 Murzakov, B.G. 9001
 Musayev, S.H. 1983
 Mushika, Y. 2427, 2435
 Musich, E.G. 7418
 Musil, M. 2172
 Musilek, V. 7187, 8015, 8022
 Musikova, M. 3542, 3644
 Muskhani, H.K. 8354
 Must, H. 2849
 Mutatschiev, S. 6576
 Mutanda, L.N. 1524, 9011
 Mutharasan, R. 9262
 Mutharasan, R. 900
 Muthukumar, G. 593, 3784
 Muto, A. 929
 Muto, N. 4415, 8886
 Mützelburg, I.D. 191
 Muylens, H.L. 7924
 Muzikova, D. 2249
 Mwenikale, A.J. 7698
 Myashnikova, L.G. 2519
 Myatiko, E.A. 9988
 Mycelski, R. 5319
 Myers, C. 8841
 Myers, G.A. 3323
 Myers, W.F. 6307
 Myerson, A.S. 8712
 Myerson, D. 7231
 Myhre, S. 1109
 Myro, S. 8402
 Myrold, D.D. 5110
 Myrro, A.W. 3533
 Myrton, L.R. 5953
 Nabbut, N.H. 3641
 Nabeshima, S. 6313
 Nacescu, N. 6285, 6287
 Nachmias, A. 1246, 3979, 7648
 Nada, A. 5225
 Nadakavukuren, M.J. 5148
 Nadarajah, M. 8067
 Nadelhoffer, K.J. 6895
 Nader de Macias, M.E. 9161
 Nadjari, G.B. 4601, 9669
 Nade, F. 1740
 Naeveke, R. 3256
 Nagabushan Rao, S. 6084
 Nagai, H. 7450
 Nagai, I. 4502
 Nagai, J. 9187
 Nagai, S. 4260, 4383, 7150, 7151
 Nagamami, V. 7616
 Nagamawa, H. 1651, 1658, 2809, 2823, 3422, 5539, 6219, 7449, 7778
 Naganuma, T. 1971
 Nagao, A. 77, 107
 Nagao, N.K. 446
 Nagaraja, T.G. 6680
 Nagarajan, S. 1166, 4958
 Nagaraju, S. 3034
 Nagasaki, S. 6477
 Nagasaki, T. 4407
 Nagasaka, S. 8362
 Nagasawa, T. 4557, 4581, 8204
 Nagata, K. 6481
 Nagate, S. 2568, 2569, 5277
 Nagatani, N. 8911
 Nagayama, K. 4558
 Nagel, C.W. 1555, 2448
 Nagel, D.L. 3725
 Nagel, J. 3075, 9421
 Nagomaya, S.S. 184, 7527
 Nagradova, N.K. 4693, 7332, 7352
 Naguib, A.J. 9607
 Naguib, M.M. 4797
 Nagy, G.S. 4006
 Nagy, L.A. 153, 1722
 Nagy, S. 9452
 Nahapetian, N. 6263
 Nahas, N. 979
 Nahdi, S. 7616
 Naheed, R. 3022
 Naider, F. 6542, 7170
 Naidoo, G. 9359
 Naidoo, J. 7046
 Naik, D.M. 1180
 Naiki, T. 2137
 Nainan, O. 373
 Nair, B.C. 371
 Nair, G.S. 3094
 Nair, K.R.G. 7975
 Nair, M.C. 3094
 Nair, M.R.G.K. 4251
 Naito, R. 8628
 Naito, T. 5257
 Nakae, T. 718
 Nakagawa, A. 3354, 3432, 5279, 5280, 8904
 Nakagawa, H. 6449
 Nakagawa, K. 7552, 8455, 8872
 Nakagawa, M. 898, 5542
 Nakagawa, S. 4616, 5257
 Nakagawa, T. 7589
 Nakagawa, T. 887, 8365
 Nakagome, K. 2303
 Nakagome, T. 8840
 Nakagomi, O. 7300
 Nakaguchi, O. 919
 Nakahara, H. 662
 Nakahara, K. 918, 921, 2582, 7451
 Nakahara, N. 3592
 Nakahara, T. 5996
 Nakai, K. 5995
 Nakai, R. 8130, 8133
 Nakajima, A. 4258
 Nakajima, E. 045
 Nakajima, H. 4077, 6423, 8339, 8346
 Nakajima, K. 4720
 Nakajima, M. 8242, 9766, 9789, 9790
 Nakajima, T. 857, 1950, 8906
 Nakakita, Y. 898
 Nakakita, T. 9177
 Nakamura, T. 6087
 Nakamoto, H. 1863
 Nakamoto, S. 8130, 8133
 Nakamura, F. 6215
 Nakamura, G. 4396
 Nakamura, H. 1651, 1658, 6218, 6219
 Nakamura, M. 1515, 2576, 5844
 Nakamura, M. 9906
 Nakamura, S. 1644, 1661, 1663, 2057, 2091, 5190, 6539, 6719, 7371, 8906, 9794
 Nakamura, T. 3423
 Nakamura, W. 3583
 Nakanishi, E. 6097
 Nakanishi, K. 1944, 5315
 Nakanishi, T. 3794, 5413
 Nakano, H. 8842
 Nakano, J.H. 9859
 Nakano, M. 2461
 Nakao, T. 9847
 Nakashima, I. 8329
 Nakashima, T. 301, 5126
 Nakashio, S. 2057
 Nakasone, A. 1942
 Nakazawa, H. 1343
 Nakata, A. 4553
 Nakata, S. 9847
 Nakatani, S. 6523
 Nakatsu, K. 1652
 Nakatsubo, F. 3763, 3778, 6651
 Nakayama, A. 255
 Nakayama, F. 7163
 Nakayama, K. 2731, 2732, 8520
 Nakayama, M. 1666, 9759
 Nakayama, R. 944, 1915
 Nakazato, M. 277
 Nakazawa, A. 6416
 Nakazawa, H. 3257
 Nakazawa, K. 277
 Nakazawa, M. 2515
 Nakhapetian, L.A. 1860
 Nakhapetian, L.A. 5521
 Nakou, M. 865
 Nail, B.T. 4559, 4560
 Nam, D.H. 9749
 Namba, T. 1559, 2433
 Nambiar, P.T.C. 4250, 7015, 9591
 Nambudripad, V.K.N. 2058, 2965
 Namstropkova, V.P. 778, 7719
 Nand, S. 2588, 2589, 5277
 Namikoshi, M. 3445
 Nance, W.L. 6908
 Nanda, G. 9122
 Nanda, G.S. 1159
 Nandapalan, N. 9014
 Nandi, B. 168, 441, 4105
 Nandi, R. 7067
 Nandris, D. 5081
 Nandy, S.C. 7429
 Nanjo, F. 8302
 Nanmori, T. 5428, 7317, 8301
 Nanninga, N. 1984
 Nannipieri, P. 2343
 Nanson, N.J. 251
 Naon, Y. 277
 Naot, Y. 9902
 Naplekova, N.N. 8663
 Naqvi, S.A.M.H. 3978
 Narahara, H. 4522
 Narania, K. 3776
 Narasiah, K. 4436
 Narhi, L.O. 8322
 Narikawa, O.T. 2625
 Narisada, M. 4361, 4407
 Nars, P.W. 742
 Narushima, H. 5582
 Nasef, A.M.M. 8757
 Naser, W.L. 2652
 Nash, C.H. III 6115
 Nash, D.R. 2401
 Nash, G.V. 3514
 Nash, J. 4723
 Nasim, A. 9067
 Nasreen, S. 293
 Nassar, A.Y. 299
 Nastasi, A. 8829
 Nastarjan, A.M. 6679
 Natarajan, K. 2303
 Natarajan, R. 893
 Nath, I. 9658, 9659
 Nath, R. 7757
 Nathaniels, N.Q.R. 4041
 Natori, S. 7454
 Natori, Y. 2827, 2829
 Natsume, H. 4904
 Naude, R.T. 2028
 Nault, L.R. 364, 1120, 4947, 6843
 Naumann, K. 5752
 Naumenko, N.F. 9553
 Naumov, R.P. 2019, 8962
 Naumski, R. 1957
 Nauschuetz, W.F. 9039
 Nautiyal, C.S. 3242
 Nautiyal, M.C. 3030
 Navale, P.A. 2138
 Navarova, T. 5997
 Navarro Gamero, R. 5305
 Navarro, A.R. 5571, 6631
 Navarro, J.M. 139
 Navashin, P.S. 3425
 Navashin, S.M. 769, 6160
 Navasina, S.M. 2394
 Navau, H.P. 2858
 Navro, J. 5989
 Nawa, I.N. 1180
 Nawrocka, K. 4785
 Nayak, D.N. 619
 Nayyar, W. 9863
 Neale, E.V. 2083
 Nazly, N. 9982
 Ndiho, M. 9889
 Ndiokubwayo, J. 420
 Neeman, Z. 3554
 Neal, H.D. S.C. 8490
 Neal, J.L. 2900, 5108, 5884, 6951, 8691
 Neale, R.J. 9285
 Neborachko, V.S. 2406
 Nebreda, A.R. 44
 Nedbalova, B. 2102
 Nedkov, P. 550
 Nedvdikova, J. 5240
 Neelakantan, S. 1826, 3662
 Neely, D. 3029, 5745, 5874, 9480
 Negi, S.S. 5408
 Negish, A.K. 1584
 Negm, S. 1813
 Neldeman, S.L. 2840, 2841, 4659
 Nehof, R.A. 818, 5140, 5990
 Neill, R.J. 7642, 8524
 Neilson, N.E. 5902
 Neilson, A.H. 2889
 Neilson, M.J. 9256
 Neira, R. 2030
 Neish, G.A. 7181
 Nekrashtate, G.I. 28
 Nel, P.C. 9324
 Nelge, K. 8998
 Nell, J.H. 8938
 Neilan, J. 2752
 Neilson, C.E. 4200
 Neilson, C.L. 193
 Neilson, D.W. 6986
 Neilson, E.B. 2854, 3122
 Neilson, E.E. 545
 Neilson, G.A. 1230
 Neilson, J. 5044
 Neilson, J.A. 9691
 Neilson, K.E. 2905
 Neilson, M.M. 155, 160, 3229
 Nelson, L.R. 3123
 Nelson, M.G. 5058
 Nelson, M.J. 4593
 Nelson, M.R. 408
 Nelson, P.E. 3204
 Nelson, P.V. 2396
 Nelson, R.C. 6073
 Nelson, R.L. 9730
 Nelson, R.R. 3005
 Nelson, S.L. 7884
 Nelson, S.M. 3401, 3444
 Nemas, C. 6306
 Nemas, S. 5093
 Nene, V. 4661
 Nene, Y.L. 1142, 1367, 4938
 Nenkov, P. 2706
 Nentwichova, M. 1048, 1986
 Nerad, T. 4811
 Nerad, F. 258
 Ner, P. 8514
 Nerud, F. 7187, 8015
 Nerurkar, L.S. 9639
 Nes, I.F. 2056, 7120
 Nesbakken, T. 8209
 Nesbitt, A.B. 7096
 Nesbitt, G. 6190
 Nesmeyanova, M.A. 8294
 Nesmith, W.C. 8675
 Nespiak, A. 8435
 Ness, G.E. 2042, 4765
 Nestas, E. 9085, 9756
 Nestor, E.W. 2202, 7689
 Nestor, S. 219
 Nesterenko, E.A. 1891
 Nesterenko, O.A. 628, 2664
 Nesterova, L.V. 1636
 Nesterova, M.V. 6460
 Nestmann, E.R. 9639
 Nether, J. 7248
 Neter, E. 2666, 9934
 Neto dos Santos, K.R. 6312
 Neto, F.B. 2274
 Netrital, P. 1974, 7501
 Netrital, J. 2479
 Neuf, H. 9099
 Neu, H.C. 722, 2533, 2537, 3395, 3404, 4329, 4413, 6118, 6148, 6150, 7142, 8832, 8833, 8849, 8858, 8893, 8899
 Neu, H.C. 8039
 Neu, M. 5997
 Neubauber, D. 9179
 Neufang, H. 9170
 Neufeld, R.J. 5142
 Neuffer, G. 8355
 Neuhaus, D. 3730
 Neuman, M. 6088
 Neumann, D. 3867
 Neumann, P.J. 896
 Neumestova, O.N. 6230
 Nevarez, M. 3382
 Newall, C.E. 2540
 Newell, J.O. 7362
 Newbanks, D. 2131, 8640
 Newbold, P. 602, 2320, 2348
 Newbold, P.P. 6953
 Newell, S.J. 3623
 Newhouse, J.R. 6352
 Newman, A.J. 1626, 1627
 Newman, E.J. 569
 Newman, M.A. 4543
 Newman, M.B. 8985
 Newman, R.H. 1469
 Newsom, S.W.B. 2400, 2426
 Newton, J.A. 1706
 Neyra, C.A. 8699
 Ng, H. 1538
 Ng, T.K. 7603
 Ng, T.L. 2017
 Ng, W.S. 756, 7132, 7985, 8807
 Ngala, G.N. 9366
 Ngala, Y. 9895
 Ngirangabo, G. 420
 Ng, T.O. 7345
 Nguyen, G. 8863
 Nguyen, J.H. 1602
 Nguyen, V.C. 1590
 Niapo, W.M. 7255
 Niari, F.R. 1438, 6847
 Nicas, T.I. 5158
 Niclas, D.J.D. 559, 3693, 6997, 7319
 Nichols, P.H. 491
 Nichols, D.E. 9814
 Nichols, P.D. 5685
 Nicholson, R.L. 3015
 Nicholson, J.W.G. 246
 Nicholson, R.J. 2015, 9081
 Nickell, C.D. 6739
 Nickelson, L.J. 1170, 2272
 Nickelson, R.T. 2935, 4808
 Nickerson, K.W. 1018, 4717
 Nicola Giudice, M. de 6048
 Nicolas, J.C. 3531, 6292
 Nicolas, M.H. 8813
 Nicole, M. 5081

- Nicole, M.R. 5879.
Nicolescu, G. 4712.
Nicolescu, M. 5380, 6266.
Nicolett, G. 4340.
Nicolett, P. 6126, 6186, 6187, 7138, 9757.
Nicolino, M.L. 9669.
Nicolle, L.E. 680.
Nicolosi, V.M. 9032, 9721.
Nicolosi, S. 936.
Nielsen, J. 3941, 8624.
Nielsen, J.D. 6943.
Nielsen, K.H. 9914.
Nielsen, R.V. 3429.
Niemele, S.I. 1715, 7201.
Niemi, F. 429, 3072, 3073, 3972, 6888, 8566, 8567, 8608.
Nies, B.A. 7899.
Niessen, A.J. 8556.
Nieves, B.M. 4410.
Nigam, S.N. 7015, 9475.
Nightingale, C.H. 7995.
Nihira, T. 5501.
Nida, T. 3716, 5246, 6135, 6136.
Nijhuis, H. 2067.
Nijhuis, V.H. 5642.
Nik, W.Z. 2111.
Niki, K. 8192.
Nikishina, K. 6101.
Nikitenko, V.V. 7958.
Nikitin, Yu.E. 8869.
Nikitin, Yu.S. 3688, 8019.
Nikola, P. 7194.
Niklasson, B. 9854.
Nikodemus, I. 197.
Nikolaev, S.M. 7872.
Nikolova, K. 4541.
Nikolsky, B.V. 1435.
Nikonova, N.A. 2518.
Niks, R.E. 2133, 2264, 2265, 4057.
Niksh, S.C. 4944.
Niles, A.C. 5157, 9930.
Ninane, G. 4374.
Nilson, E.T. 3210.
Nilsson, K.M. 4836.
Nilsson, B. 8335.
Nilsson, I. 2669, 9858.
Nilsson, K. 8127.
Nilsson, L. 2816.
Nilsson, N.H. 7066.
Nilubol, N. 1825.
Niman, H.L. 1748.
Nimi, O. 6522.
Nimmannitt, S. 8226.
Nimmich, W. 8335.
Ninane, G. 4374.
Ninnekar, H.Z. 3674.
Ninomiya, R. 2743.
Ninomiya, Y. 3552.
Nio, H.L. 5828.
Nippard, G.J. 9073.
Nishi, A. 2727.
Nishi, A. 2576, 5057.
Nishibuchi, M. 2949, 8136.
Nishida, K.M. 6659.
Nishida, S. 2057, 2091, 6719.
Nishida, T. 7179.
Nishihara, T. 3666.
Nishihata, K. 5246.
Nishijima, M. 277, 6580.
Nishikawa, J. 4360, 4361.
Nishimaki, J. 3350.
Nishimaki, T. 1894.
Nishimura, A. 5525.
Nishimura, H. 945, 3732, 3736.
Nishimura, J.S. 8225.
Nishimura, M. 4555.
Nishimura, S. 1894.
Nishimura, Y. 6220, 6221.
Nishino, M. 6215.
Nishino, N. 3786.
Nishino, T. 3723, 9187, 9488.
Nishio, M. 9794.
Nishio, N. 4260, 5563.
Nishio, T. 4396.
Nishira, H. 3786, 5428, 7317, 8301.
Nishise, H. 777, 107.
Nishizawa, N. 4402.
Nishizawa, R. 8389.
Nishizawa, T. 1970.
Nishizawa, Y. 4383, 7150, 7151.
Nisizawa, K. 6453.
Nisizaki, R.P. 1733.
Nisizaki, K. 2762.
Nitsche, E. 8273.
Nitta, K. 7448, 9223.
Nitta, Y. 1862.
Nitta, R. 8732.
Nitzan, Y. 3269.
Nwa, T. 6136.
Nwayama, S. 5371.
Niyazova, G.A. 2334, 2347.
Nizamuddin, T. 714.
Njapau, H. 1100.
Nnodu, E.C. 4003, 4007.
Noack, D. 762, 2808.
Noaman, A.A. 4797.
Noble, S.A. 5210.
Noble, W.C. 7046.
Nocci, T. 6452.
Nocella, D.E. 438.
Noda, H. 2763.
Noda, I. 6453.
Noda, M. 4583.
Noda, T. 8283.
Noe, C.R. 2437.
Noe, J.P. 1215.
Noecker, E. 5483, 6396.
Noel, K.D. 7010.
Noerrung, V. 6329, 6330.
Nogami, T. 5700, 5164.
Nogi, Y. 4655.
Nogimori, K. 302.
Noguchi, H. 3398, 8838, 8839, 8840.
Nogueira, S.A. 6312.
Nohrstedt, H.O. 7005.
Nohrstedt, H.O. 7835.
Noike, T. 1515.
Nojima, S. 4299.
Nokura, K. 5601.
Nolan, R.D. 4373.
Noll, B. 6730.
Noll, B.L. 6736.
Noma, Y. 3732, 3736.
Norn, F. 8561.
Norne, S.F. 1385.
Norn, R. 6522, 8906, 9643, 9794.
Nornmikk, H. 7844.
Nornura, A. 1592.
Nornura, H. 4299, 7448, 7991.
Nornura, K. 4541.
Nornura, S. 1673.
Nornnen, S. 5888.
Nor, Y.M. 616.
Norberg, T. 4703.
Norcross, N.L. 7577.
Nord, C.E. 3312, 7577.
Nordbrink-Hertz, B. 2715.
Norden, C.W. 755, 6123, 7058.
Nordgren, A. 6898.
Nordheim, E.V. 3740.
Nordquist, P.T. 5715.
Norelli, J.L. 1406.
Norian, J.O. 5209.
Norkrans, G. 2055.
Norman, S.M. 3646, 5531.
Normand, P. 2227.
Norrbj, S.R. 2440.
Norred, W.P. 8494.
Norris, G.J. 4865, 5451.
Norris, K. 9227.
Norris, K.E. 892.
Norris, L.M. 4817.
Norris, M.L. 882.
Norris, R.C. 4945, 7678.
Norris, R.F. 9427.
North, J.A. 8787.
North, R. 4842.
Northolt, M.D. 284.
Nortje, G.L. 2028.
Norton, G. 3853.
Norton, L.L. 6424.
Norton, M. 9481.
Norton, R. 5754.
Norton, S. 8046.
Norwood, J.M. 6820, 8587.
Nose, N. 252.
Noskov, F.S. 5405.
Nosov, N.N. 7296.
Nosova, T.V. 7348.
Notermans, S. 4905, 9293, 9297.
Noto, T. 641.
Nour, M.A. 4797.
Nouvion, N. 1060.
Novack, A. 3055.
Novais, J.M. 2765.
Novak, B. 3206, 7839.
Novak, E.K. 3277.
Novak, J.B. 2173.
Novak, M.I. 4375.
Novakova, J. 2094, 2174.
Novick, N.J. 552.
Novick, R.P. 5156.
Novello, C. 7714, 7754.
Novikov, V.K. 2117.
Nowak, T. 7398.
Nowitzki, S. 922.
Nozaki, M. 8786.
Nozaki, Y. 1867.
Nozawa, R.T. 7911.
Nozawa, Y. 8009, 8786.
Nozhenko, L.S. 8062.
Nozhnevnikova, A.N. 2386.
Nozoe, S. 4421.
Nozu, M. 8676.
Nuckles, E. 3089.
Nuhi, A. 1725.
Nukina, M. 6620.
Numa, S. 8219, 8222.
Nunez-Montiel, O.I. 9907.
Nunez, J.A. 198, 8470.
Nunez, M. 198, 8470.
Nur, I. 2749, 5037, 5699.
Nur, I. 2494, 5943, 9599.
Nurmaho-Lassila, E.L. 9597.
Nusrath, M. 7616.
Nuss, P.V. 7157.
Nussbaumer, J. 2437.
Nuttall, P.A. 3621.
Nutter, F.W. 9362.
Nyaga, P.N. 1069, 2051, 3837.
Nyagahungu, I.K. 2065.
Nyberg, M. 9624.
Nydegger, U. 1384, 2232.
Nylen, P.H. 155.
Nyhlen, E. 4624.
Nykaenen, I. 8371, 9205.
Nyland, G. 1153, 3165, 5787.
Nyland, J.-E. 533, 3165.
Nyns, E.-J. 2858.
Nys, P.S. 6402, 6492.
O Carra, P. 8392.
O'Beirne, A.J. 9857.
O'Boyle, D.A. 8954.
O'Brien, A.D. 2962, 4909.
O'Brien, E. 4898, 7287.
O'Brien, G.J. 5864.
O'Brien, M. 6853.
O'Brien, P. 8392.
O'Brien, R.G. 1257.
O'Brien, R.T. 4803.
O'Brien, T.F. 6004.
O'Callaghan, J.R. 7834.
O'Connell, A.M. 4136.
O'Connell, E.L. 6434.
O'Connor, F. 4826.
O'Connor, J.R. 3325, 5222.
O'Dell, C.A. 5214.
O'Donnell, I.J. 6466.
O'Donovan, G.A. 2758.
O'Haver, K.W. 6800.
O'Leary, G.P. J. 7383.
O'Leary, J. 2906, 4788.
O'Leary, T.J. 815.
O'Neil, J.B. 4845.
O'Neill, N.R. 1193, 5713, 9357.
O'Neill, T.M. 2283.
O'Reilly, J. 6584.
O'Reilly, T. 2805.
O'Sullivan, J. 5266.
O'Toole, D.K. 8129.
Oades, S.M. 565.
Oak, S.W. 5868.
Oak, J.H. 9338.
Oka, T. 9707.
Obaid, S.R. 3401.
Obaseki-Ebor, E.E. 3276, 7045.
Obata, H. 2057.
Obaton, M. 5514.
Obayashi, A. 8219.
Obenauf, G.L. 1396.
Obeng, L.E. 6273.
Oberbaumern, I. 5268.
Oberhofer, T.R. 9019.
Oberman, H. 7474.
Obeta, J.A.N. 8675, 9041.
Obi, Y. 133, 3709, 3710, 3785, 6616, 6617, 8437, 8438.
Obijeski, J.F. 8046.
Obinger, J.L. 241, 244, 267.
Obis, J. 7804.
Obis, A. 8549.
Obusku, C.O. 3178, 7018.
Ochiai, H. 5371.
Oda, H. 2776, 2892.
Oda, K. 2735, 3692.
Oda, T. 8007.
Oda, Y. 9187.
Odakura, Y. 6195.
Odawara, Y. 789.
Odds, F.A. 1567.
Odei, M.C. 1011.
Odell, G.V. Jr. 5127.
Odell, O. 5123, 8688.
Odham, G. 4496, 6326, 7240.
Odiar, E. 8428.
Odugbemi, T. 3270, 9925.
Odunfa, S.A. 3225.
Oeberg, B. 3216, 6065.
Oegard, L. 3212.
Oeberg, T. 7601.
Oertel, C. 2270.
Oestergerd, H. 3906.
Oesterheldt, D. 922.
Oesterud, B. 3893.
Oestervold, B. 7074.
Offit, P.A. 653.
Offner, J.A. 7849.
Ogai, D.K. 1983.
Ogaki, J. 3666.
Oganian, E.A. 8577.
Ogasawara, N. 6371, 6763, 8197.
Ogata, M. 2668, 5211.
Ogata, S. 1897.
Ogata, T. 6519.
Ogawa, H. 3311, 3716, 4570, 6322, 9781.
Ogawa, J.M. 1396, 1413, 4777, 5719, 5801, 5835.
Ogawa, M. 2743, 9248.
Ogawa, S. 7282.
Ogawa, T. 1954, 2006, 4438.
Ogawa, Y. 6136.
Ogawara, H. 3297.
Ogborne, C.I.C. 550.
Ogborne, J. 9216.
Ogilvie, K.K. 1572, 7099.
Ogino, H. 4414, 6135.
Ogino, T. 3645, 3647, 7897.
Ogneva, N.S. 3388, 7968.
Ognibene, A.J. 9656.
Ognibene, K.-H. 5321.
Ognydzki, D.M. 1921, 2921, 3681.
Ogunbi, O. 1773.
Ogundana, S.K. 442, 3339, 5791.
Ogundero, V. 8295, 8601.
Oguntona, T. 8289.
Ogura, K. 1916.
Ogura, M. 4583, 5474, 5481.
Ohashi, K. 942, 6553.
Ohb, M. 9123.
Ohba, R. 3680.
Ohg, T. 7177.
Ohhashi, M. 5253.
Ohkishi, H. 4557, 4581, 8204.
Ohlbaum, A. 8238, 8264.
Ohlin, A. 9931.
Ohm-Smith, M.J. 2432.
Ohm, H.W. 9342.
Ohm, K. 7038.
Ohmine, K. 3789, 8318.
Ohmura, K. 5601.
Ohmori, D. 3654, 5519.
Ohmura, K. 715.
Ohmura, K. 6239.
Ohnishi, M. 6484.
Ohnishi, Y. 2024, 8267.
Ohno, Y. 955.
Ohnuki, T. 3686, 7452.
Ohr, H.D. 9372.
Ohtani, T.M. 2283.
Ohsawa, H. 1900.
Ohsima, J. 3397.
Ohsilman, M. 4707, 5561, 8346.
Ohsima, S. 6153.
Ohsima, T. 6308.
Ohsima, Y. 7295.
Ohsima, J. 2538.
Ohta, H. 4219.
Ohta, K. 9244.
Ohta, M. 8329.
Ohta, S. 3654.
Ohta, T. 1914, 4241, 6478, 6514.
Ohtani, A. 1834.
Ohtsuki, R. 7315.
Ohtsuru, M. 41, 100.
Ohya, S. 5241.
Ohyama, K. 6515.
Oikawa, S. 5995, 8791.
Oikawa, T. 9216.
Oinas, R. 4467.
Oishi, K. 1967, 6386.
Oishi, T. 4515, 7127.
Oiwa, R. 1561, 3436.
Ojala, J.C. 7804.
Oja, H.L. 7718.
Oja, E.O. 3333.
Okabe, K. 2579.
Okabe, M. 1649, 1650, 9712.
Okada, H. 8299, 9856.
Okada, S. 919.
Okada, Y. 1804, 3340, 5430, 6553, 9055.
Okafar, N. 1027, 9041.
Okami, Y. 1539, 1655, 3686, 7452.
Okamoto, H. 3053.
Okamoto, K. 6452, 9298.
Okamoto, M. 7451.
Okamoto, R. 1649, 8911, 9712.
Okamoto, T. 4309.
Okamura, M.Y. 3651.
Okaniishi, M. 6313.
Okano, K. 5631.
Okatani, M. 6457.
Okazaki, H. 641.
Okazaki, T. 6217, 8455, 9789.
Oki, T. 5538, 5539.
Okie, W.R. 1214, 5045.
Okima, S.N.M. 8555.
Okion, Y. 410, 412, 2355, 2749, 3065, 5941, 5943, 6842, 6988, 8575, 8702, 9599.
Okonogi, K. 1863.
Okorokov, L.A. 45.
Okorokwo, N. 3178.
Okos, M.R. 6836.
Oksent, E.S. 8276.
Okuchi, M. 1666, 9759.
Okuda, H. 1876.
Okuda, S. 3445, 8217.
Okuda, T. 3398, 6200, 8839.
Okura, S. 9241.
Okumura, M. 921, 6188.
Okumura, H. 8327.
Okumura, Y. 8911.
Okumey, O. 7267, 7330, 8324, 8444.
Okushima, M. 91.
Okuyama, D. 1651.
Okuyama, E. 8516.
Okuyan, M. 9131.
Olama, Z.A. 9198.
Old, D.C. 3592, 8364.
Old, K.M. 563, 4223.
Oldacre, S.L. 8380.
Oldfield, G.N. 4920.
Oldfield, S. 7089.
Oldfield-Stenkist, E. 9848.
Olem, H. 1699.
Olembo, T.W. 4151.
Olenchok, S.A. 1727.
Olenovska, Z.M. 2187.
Olberius, J. 1368.
Oljhoek, A.J.M. 1984.
Oliver, J. 1503, 6982.
Olivera Paiva, W. 7713.
Oliveira, D.A. 2273, 2274, 2291.
Oliveira, L.A. 2933.
Oliveira, A.J. 6942, 6997.
Oliver, G. 2886, 4721, 7336, 9161, 9878.
Oliver, J.D. 8369.
Oliver, P.R. 5349.
Oliver, R.M. 7311.
Oliver, S. 4540.
Olivera, B.M. 1962.
Oliver, A.P.C. 8213.
Olinchuk, T.S. 1991.
Olkhovatova, O.L. 5543.
Ojley, J. 4209.
Olsen, D. 6535.
Ollis, D.F. 1064, 1979.
Oliveira, M.S. 9299.
Olivier, B. 7197, 9560.
Oliness, A. 4231.
Olsen, M.W. 4039.
Olson, P.E. 8681.
Olson, B.D. 6785.
Olson, B.H. 633, 1722, 3465.
Olson, J.M. 6589.
Olson, K.R. 176.
Olson, M.N. 9940.
Olson, N.F. 9216.
Olson, O.T. 4454.
Olsufyeva, E.N. 781, 2592.
Olsvik, O. 2961, 3886.
Oltmann, Oe. 1109, 1111, 5655, 7239.
Oltsik, F.E. 8658.
Oltsik, P. 8316.
Olutola, P.O. 8258.
Omenaca, M. 740.
Omori, A. 5615.
Omori, K. 8382.
Omori, T. 5582, 8520.
Omoto, T. 886, 4402, 4414, 6135.
Omran, M.S. 5964.
Omumu, J.O. 316.
Omura, S. 1561, 1646, 1674, 1977, 2568, 2569, 3354, 3432, 3434, 3436, 3446, 4724, 5277, 5279, 6186, 6190, 8217, 8820, 8904, 8919, 9770, 9772.
Omura, T. 1162, 4897, 9364.
Onda, M. 1977.
Oner, M.D. 9103.
Onesrosnar, P.T. 4931.
Ong, C. 862.
Ong, L.H. 7368.
Ong, S.L. 9831.
Onishchenko, A.N. 9316.
Onishchuk, F.D. 9692.
Onishi, H. 1937.
Onishi, M. 8811.
Ono, B.I. 3272.
Ono, H. 4382.
Ono, M. 6217, 8900, 8901, 9787, 9792.
Ono, S. 8523.
Ono, Y. 4013.
Onoue, H. 4361.
Onoue, Y. 276.
Onoyama, Y. 4290.
Onuma, Y. 8522.
Onyike, E. 3847, 4778.
Ooka, T. 6627.
Oon, G. 2202.
Ooshima, H. 3789, 8318, 9265.
Oosterhuis, N.M.G. 8213.
Oosterom, J. 3566, 4799.
Oouchi, N. 6387.
Oparina, A.A. 1868.
Opdebeek, J.F. 7577.

Author Index

- Opel, H. 6730
Oppenorth, D.C. 2223, 5031, 5748
Oprea, D.J. 6410
Oppenheimer, D. 6020
Opsahl, W.P. 8431
Orchard, V.A. 2337
Orcutt, D.M. 3983, 5785
Orden, B. 6128
Ordenez, J.A. 2402
Ordenez, N.G. 827
Orkhova, V.M. 8870
Orellana, R.G. 8533
Oremland, R.S. 7543
Orie, J. 8378
Origa, A. 5397
Oreshchenko, L.I. 1891
Oreshina, M.G. 975, 2492, 6077
Oreshkin, N.V. 6677
Orfila, J. 875
Orion, D. 1307, 7648
Orlino, T. 1985
Orlando, A.R. 4629
Orlean, P.A.B. 66
Orlova, N.V. 2564, 4394, 6229, 8005
Orlova, R.S. 7070
Orlov, T.I. 3326, 6237
Orlov, V.A. 8006
Ormay, L. 2909
Orme-Johnson, W.H. 4593
Orme, E.D. 3646
Ormerod, J. 8209
Ormesher, J. 8279
Oron, U. 7841
Oronzo, G. 2561, 4390
Oros, G. 3987, 4269
Oroszian, S. 7297
Orpin, A. 849
Orsini, G.S. 7243
Orr, D.C. 8835
Orr, G.R. 6506
Orson, L.H. 3475
Orson, A. 6126, 7138, 9757
Orsi, N. 5181, 5014
Orszag, P. 6130
Orstavik, I. 8105
Ortega, J.M. 5517
Ortenberg, M. 6103
Ortisi, G. 7062
Ortiz, J.M. 8043
Ortiz, G. 1573, 6064
Osada, Y. 3311
Osajima, K. 4443
Osakai, M. 8381
Osaki, K. 2576
Osaka, M. 2620
Osawa, S. 929
Osborne, B.G. 1099
Osborne, K. 3491
Osborne, L.L. 6264
Osborne, L.S. 9486
Osborne, P. 6927
Osborne, R.C. 8988
Ose, E.E. 3377
Oseni, R.A. 9834
Oshima, T. 4640, 8194, 9123
Oshima, Y. 2863
Osin, A.P. 4858
Ospowski, T. 4304
Osman, S.F. 5650
Osmani, S.A. 8321
Osmanov, S.K. 7966
Ostapchenko, T.P. 9231
Ostaszek, S.A. 477
Ostonina, N.M. 8862
Ostoslavskaya, V.I. 7933
Ostrosky, A. 8648
Ostrovsky, D.N. 7348
Ostrowska, K. 2247
Ostry, E. 6658
Osuji, P.O. 5030
Osniajka, S.O. 7736
Ota, Y. 6483, 8317
Otake, N. 764, 765, 2567, 2578, 2824, 2827, 2828, 2829, 3716, 4424, 4570, 4904, 5542, 6192, 7163
Otake, N. 4415
Otake, T. 7085
Otholmer, B. 4829, 4834
Oten, L. 5880
Otoguro, K. 3354
Otomio, N. 4161, 8521
Otsuji, N. 4553
Ott, J.L. 3377
Ott, R.A. 9763
Ottensm, M. 29, 136
Oto, D.P. 1630
Ottow, J.C.G. 6959
Otku, G. 5600
Oto, S.H. 3037
Ouellette, R.P. 10000
Ouf, M.F. 1354
Ougham, H.J. 1881
Ough, C.S. 2868
Oura, E. 3806
Ourisson, G. 5104
Ouwelkerk, T. 790
Ovchinnikov, Yu.A. 1911
Overman, T.L. 9043, 9731
Overstijns, A. 2208, 2719
Overlurf, G.D. 853
Ovodov, Y.S. 6568
Ovodov, Yu.S. 9189
Owagby, A.G. 1588
Owen, H. 9461
Owen, M.G. 2190
Owens, N.P.P. 9829
Owens, W.E. 5194
Owens, S.A.P. 3939, 6769
Owusu, G.K. 7221
Oxborrow, G.S. 1729, 4322
Oxleff, P. 2099
Oxley, T.A. 10004
Oya, A. 3365
Oyazui, H. 4764
Oyama, H. 5877
Oyekile, O.D. 3830, 4807
Ozaki, Y. 4558
Ozawa, T. 847
Ozagawa, J.-H. 8214
Ozagowski, J.H. 7408, 8003, 8038
Ozaki, K. 942
Ozetelskovskaya, O.L. 2257
Ozeryanskaya, N.M. 6057
Ozino Marietto, O. 8942
Ozoe, Y. 8257
Paaso, B.T. 5612
Paatero, J. 7194
Paa, A.S. 3228
Paavonen, J. 9884
Paca, J. 138, 4539, 7509
Packard, V.R. 121
Packer, R.R. 1614
Pacovsky, R.S. 1502
Pacoxa, B. 2181
Padmababai, E. 1208
Padgett, S.R. 9145
Padhi, B. 1182, 3989
Padhi, S.B. 9207
Padhye, A.A. 2723, 8165
Padmakumary, G. 3094, 3096
Padmanabhan, V.D. 2658
Padmanabhan, S. 5591
Padoan, R. 9747
Paez, E. 3358
Pagan, R.J. 9233
Pagan, A. 9818
Pagan, J.S. 7111, 9658
Pagan, M.C. 8011
Page, W.J. 3253
Paggi, D. 9818
Pagliaro, R. 3859
Pai, K. 7002
Pai, H.S. 9075
Pai, M.R. 6430
Pai, S.B. 2773
Paice, M.G. 7378
Paicu, L. 8732, 8733
Paiu, P.V. 3148, 4022
Pain, G.P. 8975
Pain, R.H. 3702
Paiskovatitana, Y. 5700
Pak, S.G. 5515
Paku, S. 3277
Pai, A.K. 1272, 1280
Pai, B. 8603
Pai, B.C. 868
Pai, J. 7439
Palacz, Z. 6494
Palade, G.E. 884
Palakarcheva, M. 1339, 3115
Palaniswamy, K.S. 1534
Palca, S. 3353
Palekova, F. 4571
Paleolog, J. 1792
Palhof, B. 2052
Palin, T. 8079
Palin, J. 9343
Pal, M.L. 9888
Pallanza, R. 7183
Pallary, S.G. 9508
Palleroni, N.J. 6208
Palm, D. 1888
Palm, R. 8478
Palmis, F. 1721
Palmer, G. 952, 7291
Palmer, G.H. 6379, 6538
Palmer, G.S. 1615, 7141, 8845
Palmer, J. 5341
Palmer, J.K. 172, 2022
Palmer, J.M. 8492
Palmer, M.J. 6963
Palmer, M.L.A. 351
Palmer, M.S. 279, 7619
Palmasano, F. 7615
Palti, J. 5867
Palumbo, S.A. 264, 4816
Paly, G.K. 6029
Pamment, N.B. 4705
Pan, C.-H. 6115
Pan, S. 850, 8635
Pana, A. 7100
Panangala, V.S. 3611
Panaro, A. 8478
Panayotakou, M. 6884
Panayotov, P.C. 1155
Panayotov, C. 9106
Pangandred, W. 8299
Pancaldi, D. 2478, 6875
Panchasara, S.D. 4772
Panchenko, M.K. 6057
Panda, D.B. 2416
Pandev, K. 6210
Pandy, D.K. 494, 4297, 6062, 8605
Pandy, K.K. 558
Pandy, P.K. 3042, 3069, 5508
Pandy, R.C. 1864, 2591
Pandy, R.S. 5804
Pandian, I. 5346
Pando, E. 9264
Panduange Gowda, K.T. 4268
Panneque, A. 1888
Pant, A. 7105
Panthor, B.R. 4282
Panico, S. 7082
Panda, J. 6024
Panikabutra, K. 7078
Panikow, N.S. 6960
Pankhurst, C.E. 7003
Pannervallam, M. 940
Pano, A. 5331
Panschar, B.M. 2840
Pante, M.V. 7975
Pansier, E.A. 2337, 2381, 3182
Panti, G. 2219
Pantileev, N.P. 7271
Pantosti, A. 1803, 7089
Pantshkava, F.S. 2551
Paoioli, P.A. 5983
Papanastasiou, A.C. 9266
Papavasiliou, T. 865, 894, 2641
Papavasiliou, G.G. 6947
Papavizas, G.C. 1390, 2711, 3154, 4212, 5898, 9493, 9570
Pape, H. 1685, 2643
Papieriak, C.K. 5392
Papierik, B. 1001, 1015
Papish, B. 1053
Papoutsakis, E.T. 9065
Pappaioanou, M. 3840
Pappalardo, G. 6085
Pappas, A.C. 1424
Pappas, A.J. 3975, 5854
Pappin, C. 4524
Parada, J.L. 2943
Paradelis, G. 7124, 7185
Paradelis, T. 7819, 7842
Paramasivam, C.N. 1777
Parameswarappa, R. 4061
Parameswarar, T.N. 3985
Paranchych, W. 4575
Paranko, J. 5206, 5207
Parscandola, P. 4513, 4532
Parashar, R.D. 509, 2289
Parberry, D.G. 582, 3631
Pardonsa, B. 3745
Parejara, A. 1162
Pares, R. 1938
Pares, R.D. 4926
Pang-Bini, R. 3854
Pangmoo, P. 1588
Pans, D.F. 2882
Paris, J.M. 9150
Patil, C.E. 8141
Park, C.H. 72
Park, D. 9082
Park, J.K. 5310
Park, K.K. 9025
Park, M.L. 3902
Park, R.J. 149
Park, S.H. 6381
Park, Y.K. 6455, 7560, 9135, 9192
Parke, R.V. 4003
Parke, R.E. 8792
Parker, B.L. 7720
Parker, C.A. 1488, 1498, 6963
Parker, C.D. 963
Parker, D.D. 7998
Parker, D.S. 9910
Parker, J.A. 2917
Parker, J.H. 5365
Parker, L.L. 3841
Parker, L.W. 6964
Parker, M.E. 838
Parker, M.T. 2415
Parker, W.F. 1693
Parkin, G.F. 9840
Parkin, K.L. 5680
Parkin, M.F. 1701
Parkinson, D. 1480, 4203, 5914, 5916, 5942
Parkinson, E. 2860
Parks, L.W. 5203
Parmar, S.M.S. 3964, 7726
Parmegiani, A. 1835
Parnmenter, G. 2294
Parnmenter, J.R. Jr. 541, 547, 4168, 5923, 8527, 9517
Paroubek, M. 4351
Parr, J.F. 5976, 6242, 6360, 8955
Parnish, K.K. 5086
PARRY, M.F. 8847, 9709
Parscandola, P. 3827
Parsell, Z. 9315
Parsheva, S.N. 7867
Partiot, M. 391, 396, 3026
Parton, J.H. 8415
Parton, R. 7630
Parton, W.J. 6995
Partridge, A.D. 9519
Partridge, E. 5715
Pas, E. 1984
Pasad, R.B. 7722
Pasargilian, I. 9818
Pascargiluzmar, C. 3721
Paschal, J.W. 6212
Pascholat, S.F. 3015
Pasqual, C. 2710
Pasqual, C.B. 1366
Pasqual, M.F. 3928
Pasquel Falcao, D. 6659
Paschenko, A.A. 2384
Pashin, Yu.V. 1784
Pashkov, E.P. 8873
Pasichnik, L.A. 9800
Pasishnik, L.A. 2682
Pashkova, J. 4773
Pass, R.F. 1079
Passarella, E. 9747
Passeron, S. 6469
Passi, S. 6701
Passos, W.S. 8053
Paster, N. 689, 3852, 3881, 7628
Pasternak, N.A. 7968
Pastor Corrales, M.A. 8863
Pastor, J.C. 3421
Pastorello, P.P. 6074
Pastori, R. 6469
Paszewski, A. 6406
Paszezynski, A. 939
Paszkiewicz, A. 2542
Paszkow, J. 4491, 8293
Pate, J.C. 6727
Pate, J.S. 4247
Patei, A.A. 216
Patei, A.M. 6665
Patei, B.P.J. 7961
Patei, G.B. 2864, 5585
Patei, G. 4914
Patei, J.L. 8696
Patei, K.A. 6207, 9776
Patei, K.D. 8752
Patei, M. 2580, 8908
Patei, N.P. 6527, 9156
Patei, P.D. 4479
Patei, P.N. 340, 3138, 3139
Patei, R. 7460, 7462
Patei, R.B. 8752
Patei, R.E. 5146
Patei, R.N. 4761, 6474, 7381
Patei, T.D. 6287
Patei, T.R. 8291
Paterson, A.D. 7860
Paterson, J. 1811, 6732
Pathak, K.K. 510
Pathak, M.G. 9632
Pathak, P.N. 2396
Patil, R.B. 2113
Patil, S.S. 8563
Patil, V.D. 5121, 8770
Patil, W.S. 978
Patray, V.K. 7921, 7923, 9700
Patray, K.M. 2626
Patray, S. 6332
Patray, S.L. 948
Patrick, W.H. Jr. 8703
Patrick, Z.A. 3625
Patquinn, D.G. 7856, 9600
Patriusky, E. 8792
Pattay, F.A. 4508
Patterson, J.D.E. 1874
Patterson, J.T. 206
Patterson, R.M. 9077
Patterson, T.G. 9581
Patterson, V.J. 3728
Pattay, A.M. 8683
Patton, C.M. 9944
Patton, R.F. 9527
Patridge, K.A. 6537
Pattyn, S.R. 2466, 2467, 3419
Patwardhan, B.H. 1553
Pauer, G.D.C. 6937, 9485
Paul, A.R. 5775
Paul, E.A. 553, 615, 3186, 5968, 8680, 9563
Paul, G.C. 8287
Paul, H.L. 1757, 7221, 9404
Paul, J.H. 8128
Paul, M.O. 3313
Paul, V.K. 310
Paulech, C. 355
Paul, G. 9109
Paul, H. 8371, 9205
Paulukonis, A.B. 1855, 1901
Paulus, A.O. 1427, 5044, 9417
Paulus, T.J. 4536
Pauly, H.E. 39
Paus, G. 7139
Pauw, G. de 5855
Pauwels, H.P. 1801, 2661
Pavanassavarn, G. 7503
Pavanetto, F. 2473, 3044, 9678
Pave, A. 8132
Pavek, J.J. 9083
Pavlov, L.L. 4272
Pavlasova, E. 9137
Pavlenko, L.A. 9666
Pavlova, L. 3834
Pavlikova, E. 6658
Pavliou, S. 2673
Pavlova, I.B. 5184
Pavlova, V.A. 6105
Pavlovich, N.M. 8745
Pavlyuk D.M. 787
Pavuk, R.A. 7125, 9710
Pawar, C.P. 2138
Pawar, M.M. 404
Pawar, M.M. 1068
Pawar, C. 7197
Payen, B. 8314
Payment, P. 1740, 3468
Payne, A.G. 2611, 2612
Payne, A.L. 3869
Payne, C.C. 1005, 8356
Payton, M. 3957, 4051
Payne, J.A. 6672
Payne, S.M. 876
Payne, W.J. 5112, 9166
Payne, W.L. 4903, 9049
Paysour, R.E. 8593
Payton, M. 2324
Paz, A. 5606
Paziarova, J. 2794, 2795
Pazoutova, S. 5554
Peadar, R.N. 7750, 8558
Pearce, E.I.F. 2642
Pearce, J. 4494
Pearlstone, J.R. 4575
Pearson, R.C. 8639
Pearson, R.D. 3323
Pech, H. 307, 1108
Pechere, J.-C. 8228
Pecherina, S.A. 2428
Pech, P. 6128, 9757
Peck, G. 5345
Peck, H.D. Jr. 74, 2737, 4634, 9166
Pecorari, P. 2436, 7083
Peczynska-Czoch, W. 7447
Pecdes, F. 1225
Pekin, B. 9134
Pedersen, S.C. 3609
Pedersen, T.G. 29
Pedersen, W.L. 5710, 9363
Pedler, S.J. 5196, 9739
Pezzuzzi, J. 4368
Pechova, B. 1869
Peeler, J.T. 215, 1729, 2908
Pegg, G.F. 2779, 4077
Peirano, P. 1476
Peiris, S.P. 154
Peiser, A.J. 438
Peis, L.B. 1621
Pelak, B.A. 4409
Pelhate, J. 1321
Pelikan, E. 2177
Pelkonen, H. 4164
Pellar, T. 4351, 7146
Pellegri, F. 5015
Pellegri, M.B. 9721
Pellet, S. 2621
Pelmont, J. 3675
Pelmore, H. 936, 4864
Pelosi, R.R. 8565
Peltis, L.B. 1621
Pendery, W.E. 6754
Peng, B. 6811
Penido, E.G.C. 5961
Pennington, G.R. 3296
Penn, C.W. 835
Penn, R.L. 2639
Pennazio, S. 1378, 2993, 4034
Penninck, M. 8061
Penny, A. 5725, 5830, 5838
Penny, B.W. 1172
Penny, Packer, S.P. 4011
Penzkova, G.A. 975, 2492, 6077
Pena, V. 4354
Pepelnjak, S. 9289
Pepin, H.S. 1531
Pepin, R. 8161, 9504
Pepin, N.M. 2902
Peralta, E.-L. 9077
Perceval, A.K. 3301

- erovich, J.A. 1170, 1253, 2272, 5702, 5023, 9350, 9633.
 eroval, A. 4342.
 ercuoco, G. 7563.
 ercuoco, S. 7563.
 ercy, J. 3738.
 ercy, R.G. 9557.
 erda, A. 8054.
 erdigne, W.T.H. 3130.
 eria, J. 2376.
 eriera, J.C.V.A. 8626.
 eriera, L. 4613.
 eriera, N.A. 7948.
 eriera, R.M. 2333.
 erellino, C.M. 6594.
 erenan, B.V. 7157.
 erelman, E.V. 5418.
 erenlie, L. 3458.
 erera, K.P.W.C. 4896.
 erera, V.Y. 835.
 erez Lopez, J.A. 4278.
 erez-Mendoza, J.L. 8391.
 erez, A.C. 3421.
 erez, P. 1082.
 erez, J.L. 5230, 9735.
 erez, M. 3382.
 erez, S. 3358.
 ergolizzi, R.G. 8175.
 erigon, R.N. 5524.
 erinet, P. 590.
 erini, P. 7138, 9757.
 erkins, J.M. 9363.
 erkins, R.E. 2775, 6458.
 erkowsky, C.A. 8348.
 erley, C.R. 9004.
 erlin, C. 9114.
 ermar, T.A. 5853.
 ermorgorov, V.I. 7157, 8865.
 erol, Y. 6103.
 ertotta, A. 2822.
 erry, B.F. 7272.
 erry, D. 520, 522.
 erry, D.F. 1009, 7762.
 erry, H.C. 7112.
 erry, R. 1313, 5323.
 erry, R.G. 1459.
 erry, S.K. 5750.
 erryman, M.W. 9913, 9917.
 erson, P. 952.
 erson, S. 7943.
 escue de Ruiz Holgado, A.A. 4721, 7336, 9161.
 esho, G.R. 1126.
 eshiakas, I. 28.
 eshia, G.V.A. 9485.
 eshiana de Castro, A.F. 5656.
 5657, 9299, 9307.
 esti, M. 658, 3277.
 etchel, K.A. 8990.
 ert, K. 5752.
 eterkin, P.I. 8138.
 eterkin, G.B. 8412.
 etermueller, C. 7091.
 eters, B.B. 1323.
 eters, C.J. 9854.
 eters, D. 2107, 8358.
 eters, D.D. 6052.
 eters, D.O. 2638, 3399, 3437, 5271.
 eters, H. 4891.
 eters, R. 4799.
 eters, R.A. 4970.
 etersen, A.C. Jr. 1764.
 etersen, G.R. 8, 8486.
 etersen, J. 7326.
 etersen, T.E. 1836.
 etersen, U. 8751.
 etersen, D.A. 2488.
 etersen, D.J. 2105.
 etersen, D.L. 6890.
 etersen, G.A. 7857.
 etersen, E.M. 9842, 9908, 9967.
 etersen, G.E. 6240.
 etersen, G.L. 6753.
 etersen, H.H. 430.
 etersen, H.L. 1510, 5132, 7242, 7829, 7847.
 etersen, J.B. 22.
 etersen, J.E. 8112.
 etersen, J.F. 5687, 6783.
 etersen, J.L. 1459, 2321, 6830.
 etersen, J.W. 1105, 8519.
 etersen, L.R. 5233, 5338, 9940.
 etersen, N.J. 7207.
 etersen, R.A. 6791, 6833.
 etersen, R.E. 6725, 7264.
 etersen, R.L. 9510.
 etersen, L. 8081.
 ether, J.V.S. 2703.
 etidmange, E. 2890, 4747.
 etidmange, H. 2660, 4726, 4747.
 etiranyi, G. 8164.
 etras, P. 2087, 2959.
 etrenko, G.T. 9668.
 etrie, B.L. 4313.
 Petrov, G.I. 3547.
 Petrov, V.G. 1055, 9626.
 Petrov, V.N. 7027.
 Petrova, I.S. 6473.
 Petrova, T.M. 7027.
 Petrova, M. 4823.
 Petru, E. 2175, 2728.
 Petrkyina, Z.M. 2577.
 Petsko, G.A. 6561.
 Pettersson, H. 311.
 Pettersson, R.F. 3452.
 Pettipther, G.L. 176, 4791, 4612, 6673.
 Pettitt, D.E. 9913, 9917.
 Petursson, S. 86.
 Petushkov, V.N. 6479.
 Pfander, F.K. 2876.
 Pfahler, P.L. 9466.
 Pfaler, M.A. 1566, 9924, 9930.
 Pfeffer, J.T. 8952.
 Pfeffer, P.E. 5650.
 Pfeifer, R. 6705.
 Pfeiferova, D. 2244.
 Pfeiffer, P. 1082.
 Pfendler, W.F. 347, 9319.
 Pfizner, J. 2573.
 Pfleger, L.J. 1410, 9328.
 Pfeleiderer, G. 39.
 Pilg, U.J. 268.
 Pilg, W. 590.
 Pilha, H.J. 3048.
 Pharm, A.V. 5399.
 Phan, A.P.H. 7345.
 Phares, E.F. 6424.
 Phans, V.L. 7709.
 Phatak, S.C. 5049, 9473.
 Phillips, P. 9636.
 Phillips, P.V. Jr. 2.
 Philip, S. 3102.
 Philpott, W. 1732.
 Philipp, W.D. 6883, 8319.
 Philipp, W.D. 1401.
 Philippe, M. 3416, 6158.
 Philippon, A.M. 8287.
 Philippova, I.Yu. 8276.
 Philips, F.S. 6543.
 Phillips, A.P. 3573, 9897.
 Phillips, C.R. 4585, 9970.
 Philis, D.A. 595, 605, 2374, 4236, 7000.
 Phillips, D.R. 7238.
 Phillips, D.V. 9321.
 Phillips, I. 1803, 2550, 2680, 4378.
 Phillips, J.D. 8489.
 Phillips, J.N. 4122.
 Phillips, K.R. 3712.
 Phillips, N.J. 2116.
 Philpot, W.N. 1728.
 Philpott-Howard, J. 4356.
 Phinney, B.O. 2853.
 Phipps, B.M. 7890.
 Phipps, P.M. 1132.
 Phokhorova, T.L. 7573.
 Phokiewicz, A. 7474.
 Pivaau, A. 3093.
 Piccaglioso, S.K. 6346.
 Piccazzi, T. 6090, 6189.
 Piccini, G. 3807, 5622.
 Pichangkura, S. 4522.
 Piche, Y. 9510.
 Pichenot, M. 694.
 Pichler, H. 7139.
 Pichoud, C. 9861.
 Pickard, M.A. 2757.
 Pickenhahn, P. 6710.
 Pickett, J.A. 459, 3108.
 Picton, D.C.A. 3499.
 Pieber, M. 7510.
 Piedrola Angulo, G. 4278.
 Piemont, Y. 4817.
 Pien, F.D. 8747.
 Piening, L.J. 7674, 7691.
 Pierard, A. 8061.
 Pierce, G.E. 4759.
 Pierce, L. 1262.
 Pierson, C.F. 9373.
 Pierson, M.D. 3898, 4821.
 Pietrantoni, A. 5346.
 Pigott, N.H. 2746.
 Pignato, S. 871.
 Pigott, C.D. 4206, 4207.
 Pihlstrom, B. 8075.
 Pike, D.J. 6756.
 Pili, P. 4571.
 Piliakiewicz, F.G. 7167.
 Piliak, G.B. 8151.
 Piliak, J.S. 1012.
 Piliich, J. 6224.
 Pilott, J. 828.
 Pilioud, M. 2565, 4289.
 Pilon, L. 896.
 Pilon, L. 8164.
 Pilowsky, M. 5036.
 Pilz, D. 522.
 Pilz, E. 9619.
 Pliz, I. 1865.
 Pinchuk, L.M. 8723.
 Pinduccu, G. 1712.
 Pingear, J.A. 7576.
 Pines, G. 4537.
 Ping, L.-H. 5372.
 Pinkwart, M. 4670.
 Pinnell, R.E. 7485.
 Pinnock, D.E. 1006.
 Pintschmidt, H. 9391.
 Pinon, J. 549.
 Pinier, A. 7113.
 Pintera, J. 826.
 Pinzaui, S. 4324.
 Pioli, D. 5364.
 Pionke, H.B. 9561.
 Piont, J.C. 4101.
 Piot, P. 4334, 4353, 9711.
 Piovano, V. 4918.
 Pipes, W.O. 2475, 3484, 5309, 8956, 8967.
 Pirakittikul, P. 5345.
 Piras, M. 1824.
 Piras, R. 1824.
 Piret, J.M. 6545.
 Pirich, K. 7139.
 Pirone, T.P. 1382.
 Pirt, S.J. 3708.
 Pisanenko, D.A. 6029.
 Pisanen, M.A. 9648.
 Pischel, H. 9663.
 Pisetskaya, N.F. 6885.
 Pisko, G.T. 1558, 2523.
 Piskorska-Piszczyńska, J. 1089.
 Pitpormchai, P. 5700.
 Pitt, D.E. 5517.
 Pitt, J.J. 2942, 5437.
 Pitt, W.W. Jr. 9238.
 Pitta, G.P.B. 2203.
 Pittaway, P.A. 2720.
 Pittina, L.R. 8013.
 Pitton, J.S. 6003.
 Pitter, L. 8239.
 Place, J.D. 9763, 9785.
 Placencia, A.M. 1729, 4322.
 Placchi, A.I. 9620.
 Placinti, J. 6395.
 Plagemann, P.G.W. 9141, 9142.
 Plakhotnyak, A. 1634.
 Plank, R.W.H. 7329, 9182.
 Plant, S. 6040.
 Plante, R. 3480.
 Plassard, C. 9506.
 Plassard, C.S. 4517.
 Plassard, J. 1122.
 Platonova, N.V. 8897.
 Platonova, T.A. 2257.
 Platt, H.W. 4106.
 Platt, M. 5598.
 Platt, M.W. 5587.
 Plattner, R.D. 7437, 8198.
 Plaz, C.J. 4958, 8547.
 Playne, M.J. 8778.
 Plazibat, M. 7666.
 Plempel, M. 4301.
 Plenchette, C. 4188, 5097, 5910, 5913, 9543, 9544.
 Plazek, S.J. 7878, 8292.
 Plachkova, K. 6395.
 Pleiotz, R.C. 5795.
 Plotkin, S.A. 653.
 Ploton, C. 9957.
 Plouffe, J.F. 8972.
 Plozza-Nottebock, H. 6035.
 Plumbs, W. 4573.
 Plumb, R.T. 5725, 7676.
 Plumpton, E.J. 3459.
 Plusquellec, A. 8976.
 P, T. 4021.
 Pocsai, E. 3080.
 Podani, B. 5240.
 Podboronov, V.M. 1552.
 Podgorskaya, M.E. 9716.
 Podorvan, N.I. 8432.
 Podrazny, V. 3671.
 Poe, J. 9872.
 Poshman, J.M. 354, 1164.
 Poelma, P.L. 3831.
 Poessoe, H. 8371, 9205.
 Poh Agin, P. 7475.
 Pohl, P. 643, 3431, 5627, 6095.
 Pohlig, G. 7359, 8283.
 Pohman, A.A. 4241.
 Pohod, D.J. 3393.
 Pohronezny, K. 9376.
 Pomeroy, S.J. 4498.
 Pokarzhenskii, A.D. 1448.
 Pokoksa-Burdziej, A. 4174.
 Pokorny, F.A. 4154.
 Pokrovskaya, N.Y. 5396.
 Pokrovsky, V.I. 5166.
 Polack, J.A. 9008.
 Polak-Vogelzang, A.A. 8147.
 Polak, A. 2480, 4298.
 Polak, J. 2168, 2176, 2186, 2728.
 Polak, Z. 2177, 2728.
 Polanowsky, A. 7360.
 Polcaro, C.M. 12.
 Polidnev, S.M. 8689.
 Polidnevskaya, M. 3745.
 Polkar, A. 2706.
 Polin, A.N. 2577, 2587, 8019.
 Poling, S.M. 3646, 5531.
 Polisar, R.D. 1629.
 Polk, E.A. 912, 9916.
 Pollock, J.D. 9220.
 Pollard, C.M.D. 3917, 5707.
 Pollard, J.F. 9228.
 Pollock, A.A. 6037.
 Pollock, G.A. 9292.
 Pollock, H. 7136.
 Pollock, R.J. 9806.
 Pollock, R.V. H. 2599.
 Polo, A. 9264.
 Polomski, J.C. 9727.
 Polonelli, L. 9991.
 Polonsky, J. 6584.
 Polotskaya, I.V. 1867.
 Polotskiy, M.A. 7857.
 Poltoran, V.A. 7941.
 Polverari, A. 9400.
 Polyak, M.S. 2519, 2520, 6104, 7972.
 Polysar, R.D. 2548.
 Pometto, A.L. 2887, 4578, 9261.
 Ponce, S.L. 8973.
 Ponschi, L. 1063.
 Pond, S.E. 1465.
 Pond, S.M. 178.
 Ponder, F.Jr. 6900.
 Pongor, S. 3128.
 Ponomarenko, O.I. 7157.
 Ponomareva, T.N. 7968.
 Ponte, C. 7999.
 Ponte, M.C. 2447.
 Pontois, P. 6295.
 Poole, G.A. 5771.
 Poole, R.K. 2646, 9885.
 Poir, W. 270.
 Pop, A. 5380.
 Pop, V.I. 6250.
 Pope, A.M.S. 3673.
 Pope, D.H. 3332, 5221.
 Pope, M. 7618.
 Poshkova, V.B. 8860.
 Popoff, T. 2299.
 Popov, A.M. 2494.
 Popov, K.R. 8897.
 Popov, V.O. 7380.
 Popova, T.Ya. 9278.
 Popovici, V.B. 8860.
 Popovic, J. 6717.
 Popovich, G.E. 2708.
 Poppe, J. 2047.
 Popper, O.P. 5606.
 Poprecks, S. 881.
 Pordiesmo, A.N. 1220.
 Port, A.L. 7021.
 Porpaczy, P. 8981.
 Porpaczy, V.P. 8074.
 Porschen, R.K. 8767, 9939.
 Porschen, F. 2466, 2467, 3193.
 Porschke, V. 784.
 Portelli, M. 2439.
 Porter, B.W. 1078.
 Porter, D.M. 1132, 1342, 5680.
 Porter, E.V. 2774, 6414, 6419.
 Porter, F.D. 662.
 Porter, I.J. 4919.
 Porter, J.W. 8226.
 Porter, L.J. 2868.
 Porter, R. 578, 5695.
 Porter, R.A. 3357.
 Porter, V.L. 207.
 Portetelle, D. 4474.
 Porter, R.J. 4762.
 Portnow, A. 6396.
 Portnoy-Duran, C. 7372.
 Poschenrieder, G. 8692.
 Pospisil, L. 6224.
 Pospisil, S. 8016, 8885.
 Post, F.J. 245.
 Post, G.T. 9822.
 Postgate, J.R. 1495, 8180.
 Poston, S.M. 8736.
 Post, R. 4799.
 Potapova, N.P. 779, 781, 1641, 2532, 7839, 987, 1910, 8295.
 Potel, J. 2502, 5225.
 Potgieter, H.J. 7533.
 Potier, P. 6125.
 Potopalsky, A.I. 2444, 9692.
 Potten, M.R. 648.
 Pott, L.R. 344.
 Potter, M.E. 9944.
 Potter, M.F. 4719, 6598, 7224.
 Potvnik, V. 4347.
 Potvin, C. 840.
 Pougues, R. 4687.
 Poulos, E.G. 9912.
 Poulose, A.J. 8245.
 Poulter, R.G. 2045.
 Pourquie, J. 8325.
 Pourrat, A. 7470, 9086.
 Pourrat, H. 7470, 9086.
 Povarov, L.S. 7166.
 Povazay, S. 781, 2592.
 Povazay, M. 8637.
 Povola, A. 5240.
 Powar, V.K. 30, 8304.
 Powell, C.A. 1209, 8595.
 Powell, C.C. 1265, 2194, 3898, 4099.
 Powell, C.C. Jr. 401, 1393.
 Powell, C.L. 985, 586, 9562.
 Powell, D.A. 9870.
 Powell, G.E. 9873.
 Powell, J.M. 2318.
 Powell, M.S. 4456, 9884.
 Powell, N.T. 3050, 9432, 9433.
 Powell, P.E. 9558.
 Powell, V. 4927.
 Powelson, M.L. 5686.
 Powelson, R.J. 9361.
 Powers, B.W. 5169.
 Powers, H.R. Jr. 4148, 5805, 6924.
 Powers, J.M. 4771.
 Powers, T.B. 6537.
 Powelson, D.S. 572.
 Pozdena, J. 2178.
 Pozdnyakov, E.G. 1629.
 Pozmogova, I.N. 2390, 2725, 8859.
 Poznańska, A.A. 7387.
 Pozzi, G. 5163.
 Prabhu, A.S. 3951.
 Prabhu, C.A. 3793.
 Prae, P. 7536.
 Prager, B.C. 2437.
 Prakasham, T.B.S. 5326.
 Pramanik, A. 4889.
 Prasad, B. 8785.
 Prasad, C.B. 3343, 9276.
 Prasad, H.K. 9658.
 Prasad, K. 6214.
 Prasad, M. 5508.
 Prasad, M.M. 7686.
 Prasad, N.N. 3335, 4965, 9276.
 Prasad, R.B. 3872.
 Prasad, T. 3872, 7717, 7722.
 Prasad, V. 7854.
 Prather, E. 1082.
 Pratt, G. 5394.
 Pratt, M. 179.
 Pratt, R.G. 335, 2106, 8544.
 Prauser, H. 7556.
 Pravichenko, L.I. 8464.
 Prebble, N. 8839.
 Prebois, J.P. 2043.
 Preece, T.F. 1293, 3051.
 Preil, W. 4037.
 Preiss, J. 26, 93.
 Prentiss, M. 7157.
 Prentiss, J. 8132.
 Preobrazhenskaya, N.E. 2443.
 Preobrazhenskaya, T.A. 6109.
 Preobrazhenskaya, T.P. 1487, 2588, 5923.
 Prescott, B. 4664.
 Prescott, J.F. 7967.
 Prest, F.M. 956, 8255, 8277.
 Presley, H.A. 1519, 2220.
 Presnell, M.W. 2629.
 Prestige, E.A. 6216.
 Preston, A.F. 7761.
 Preston, C.M. 8664.
 Preston, D.A. 5221, 9745, 9746.
 Preston, G.G. 76.
 Pretorius, W.A. 8934.
 Pretorius, Z.A. 9351.
 Prettyman, D. 9814.
 Pretzman, C.J. 1241.
 Prevost, E. 7383.
 Prew, R.D. 5725.
 Price, C.P. 970, 7376.
 Price, D. 3967.
 Price, E.H. 2683.
 Price, K.E. 6002.
 Price, L.K. 2980.
 Price, M.F. 7327.
 Price, R.L. 2945.
 Price, R.W. 4940.
 Price, T.H. 1088, 2675, 9061.
 Preisner, S. 955.
 Preisner, G.G. 987, 1910, 8295.
 Prestap, H.A. 9206.
 Prieto Prieto, J. 6021.
 Prieto, J. 757.
 Prihoda, A. 3166, 3176.
 Prihodko, E.F. 9811.
 Prihodko, V.A. 1386.
 Prikluy, Z. 4141.
 Prikluy, T. 9912.
 Pirmose, S.B. 795, 2649.
 Pirose, I.G. 2873.
 Pironce, P.A. 1609.
 Prior, B.A. 7533, 9185.
 Prior, C. 1417.

- Pnor, M.G. 4845.
 Pnoul, J.L. 8701.
 Pnupitua, L.S. 7586.
 Pnrichard, D.G. 7436.
 Pnrichard, G.G. 6421, 6440.
 Pnrichard, N.J. 4455, 4458.
 Pnrivera, G. 6132, 7053, 7062.
 Pnrochazkova, Z. 2179.
 Proctor, G.N. 7307.
 Prochazkova, N.G. 7921, 7923, 9700.
 Prossler, G. 8586.
 Proietti, E. 8093.
 Prokop, A. 9987.
 Prokopov, D. 982.
 Prokopovich, A.V. 6170.
 Prokman, M. 1129.
 Proskurnia, V.A. 6110.
 Prosser, B.L.T. 6208.
 Prot, G. 428.
 Provident, R. 1292, 2195.
 Provis, J. 3135, 4068, 5778, 6855.
 Provisonato, A. 7083.
 Prozesky, O.W. 9612.
 Prozorovskij, V.N. 4684.
 Prud'hom, J.-M. 6609, 6610.
 Prud'hom, J.M. 1020.
 Prude, M. 3903.
 Pruess, D. 1632.
 Pruess, D.L. 6193, 6201.
 Prusak, E. 2659.
 Prusky, D. 2471, 6836.
 Prusoff, W.H. 2484.
 Prusjakewicz, H. 4783.
 Pseananos, K.M. 7191.
 Pshenichnov, R.A. 1784.
 Ptak, M. 6391.
 Puar, M.S. 2580, 8908.
 Puc, A. 5496.
 Puch, Z. 1357.
 Puchau, J. 6540.
 Pucheu-Planta, B. 9402.
 Puchmayerova, M. 7146.
 Puchs, C.C. 6120.
 Puckett, A. 5394.
 Puchner, G.S. 3230.
 Pughesetti, B.K. 576.
 Pugh, C.S.G. 3349.
 Pugh, G.J.F. 550, 4757, 5593.
 Pugielle, A. 8023.
 Puijals, L. 9654.
 Pugsley, A.P. 4397.
 Puhon, Z. 2020, 6662.
 Puhar, E. 3659.
 Puh, N.D. 9944.
 Puig, H. 1439.
 Puig, L. 9654.
 Pullman, G.S. 2134.
 Pulver, E.L. 7841.
 Pulverer, G. 768, 802, 2638.
 Pund, 3437, 6271.
 Pundie, A.V. 6634.
 Pundit, K. 1387, 1402, 9339.
 Puppatt, U. 5698, 8631.
 Puppel, H. 743.
 Puppi, G. 1443.
 Purcell, A.H. 2969, 3024, 4973, 5027.
 Puri, A. 5645.
 Purofil, D.E. 320, 1125, 5017.
 Purcino, A.A.C. 3232.
 Purdy, L.H. 6176.
 Purdy, R.E. 8241.
 Purohit, K. 1889.
 Pursiano, T.A. 2529.
 Puroshothaman, V. 188, 5232.
 Pusey, P.L. 6351.
 Pustovalova, L.I. 1841.
 Put, H.M.C. 1631.
 Puthucherry, S.D. 9895.
 Put, M.S. 9824.
 Putta, M. 1162.
 Putter, B. 7485.
 Putz, C. 3527.
 Pyckavet, M. 4365.
 Pye, G.W. 7936.
 Pyotis, N.A. 7249.
 Pyshnyi, S.P. 6170.
 Quayle, J.R. 4654, 6444, 6552.
 Queale, D.T. 8473.
 Quee, T.C. 3505, 8864.
 Querat, G. 2651.
 Quesada, E. 3196.
 Quicke, G.P. 9158.
 Quicker, G. 8082.
 Quiet-Sire, B. 6158.
 Quinlan, J. 910.
 Quinlan, M.R. 9073.
 Quinn, M.L. 3393.
 Quinn, J.A. 401, 1393.
 Quinn, J.P. 15.
 Quinman, G.V. 3451.
 Quinman, S.C. 204.
 Quinlan, R. 7995.
 Quirk, A.V. 2806, 7329, 9167, 9182.
 Qureshi, M.A. 7661, 7959.
 Qureshi, N. 8226.
 Qureshi, S.A. 6697.
 Qutet, S.M. 4885.
 Ra, J. 7549.
 Raahave, D. 5406.
 Rabbinge, R. 3001.
 Rabdel, E. 5620.
 Rabe, M. 803.
 Rabie, C.J. 6702.
 Rabotnova, L.L. 2390, 2725, 8859.
 Rabsch, W. 5166.
 Racco, R. 1385.
 Raccah, B. 3517.
 Raczynskaya, L.A. 7941.
 Raczynski, P. 8739.
 Radatus, B.K. 7099.
 Raddi, P. 6924.
 Radford, D.R. 3820.
 Radhakrishnan, P. 2214.
 Radics, L. 3443, 9788.
 Radke, V.L. 1359.
 Radkowski, M. 4795.
 Radler, F. 1097, 7363.
 Radomsky, W. 2062.
 Radsel-Medvesky, A. 7208.
 Radwan, S.S. 2881.
 Raeder, R. 7041.
 Raemaekers, R.H. 1180.
 Raesens, L. 8991.
 Raev, Z.A. 1991.
 Raefomananara, D. 9346.
 Raff, K.J. 8651.
 Ragazzi, A. 4154.
 Ragetti, H.W.J. 5732.
 Raghu, V. 3390.
 Raghavendra Rao, K. 9147.
 Raghoebar Rao, P. 4254, 5932, 7790.
 Ragstad, S.W. 8262.
 Rahal, J.J., Jr. 6037.
 Rahaman, M.M. 882.
 Rahe, J.E. 1426, 4103, 5848.
 Rahe, J.E. 6592, 6922.
 Rahmi, A. 4272.
 Rahmian, M.K. 5062.
 Rahman, M. 1524.
 Rahman, R. 2622.
 Rahutulu, S.M. 1042.
 Rai, P. 2987, 3146, 3771, 5694, 5855.
 Rai, M. 2221.
 Rai, R. 5955, 5963, 7854.
 Rai, R.P. 1325.
 Raigorodskaya, V.Ya. 6180.
 Rambaut, M. 6650.
 Rambird, R.M. 4247.
 Raine, G.L. 5811.
 Rains, B.D. 7738.
 Rainwater, D.L. 96.
 Raison, R.J. 1447.
 Rajagopal, B.S. 9620.
 Rajagopalan, P.K. 1028.
 Rajak, R.C. 2221.
 Rajakumar, G.S. 7429.
 Rajaramamohan Rao, V. 619.
 Rajasekar Reddy, B. 9620.
 Rajeshwari, R. 6736.
 Rajkovic, E. 9252.
 Rapaport, R.P. 9582.
 Raju, B.C. 320, 1153, 3024, 5023, 6787, 8531, 8576.
 Raju, C.A. 1188.
 Raju, G.S. 7260.
 Rajkumar, M.M. 7354.
 Rakovec, S. 3614.
 Rakus, D. 2180.
 Ralis, E.V. 7342.
 Rama Murthy, M.K. 205.
 Ramachandran, K.B. 7430, 7530, 8506, 8540.
 Ramachandran, P. 1124, 2109.
 Ramadan, M.M. 2352.
 Ramaekers, D. 5080.
 Ramakrishnan, N. 1038.
 Ramakrishna, C. 7037.
 Ramakrishnan, K. 4633.
 Ramalho de Mello, B. 6638.
 Ramalingam, A. 3940.
 Ramamoorthy, S. 1516, 1996.
 Ramamurthy, R. 6684, 7611.
 Ramamurthy, K. 111.
 Ramam, H.S. 8401.
 Raman, N. 2303.
 Raman, S.V. 3695.
 Raman, T. 7547.
 Ramarao, P. 584, 5676.
 Ramasesh, N. 4622.
 Ramaswamy, V. 1534, 1535.
 Ramesh, H. 7152.
 Ramshankar, H.N. 9591.
 Ravazzola, G. 4363.
 Rawlings, J.O. 9580.
 Ray, E.E. 4803.
 Ray, H.S.G. 5009.
 Ray, L. 6647.
 Ray, R.M. 3156.
 Ray, S.K. 3338.
 Raychaudhuri, S.P. 1436.
 Raymond, J. 8763.
 Raymond, D.P. 303.
 Raymond, L.W. 8503.
 Raymond, P. 4714, 4858.
 Rayner, A.D.M. 1437, 1445, 4158.
 Raynor, L.F. 2602.
 Razzykh, V.M. 3388.
 Read, D.J. 2328, 3199, 4213, 5929, 5930, 9538.
 Read, G.W. 5225.
 Read, P.A. 1704.
 Read, R.B., Jr. 1070.
 Reade, A.E. 7443.
 Reading, C. 1411, 5252.
 Realdi, G. 6295.
 Reali, D. 1113.
 Ream, L.W. 9318.
 Reasoner, D.J. 2640.
 Reber, C.L. 218.
 Recalde-Martinez, L. 6962.
 Recknitz, G.A. 6303, 8119.
 Reckhaus, P.M. 9355.
 Reckshetyak, L.A. 455.
 Reddy, A.B. 4963.
 Reddy, B.D. 5351.
 Reddy, B.R. 2919.
 Reddy, B.S. 3013.
 Reddy, C.A. 1517.
 Reddy, D.V.R. 4046, 6736.
 Reddy, G.S. 7832.
 Reddy, G.C.S. 1643, 7990.
 Reddy, H.R. 3034.
 Reddy, K.R. 3224.
 Reddy, L.J. 5038.
 Reddy, M.S. 832, 4250.
 Reddy, M.V. 1472, 6867.
 Reddy, P.G. 9632.
 Reddy, P.R. 384.
 Reddy, S.M. 3670, 3776, 3915, 5515, 7413.
 Reddy, V.D. 8507.
 Reder, L. 1643.
 Redfield, J. 6240.
 Redmond, M.A. 8443.
 Redolfi, P. 1378, 2156, 4034.
 Reed, J.E. 5715.
 Reed, L.J. 7311.
 Reeder, R.D. 7658.
 Rees, J.F. 3799, 4263.
 Rees, R.G. 4956, 8547.
 Reese, E.T. 1886, 1928.
 Reeser, P. 9336.
 Reeves, D.S. 4367, 6134, 8844, 9099.
 Reeves, G.W. 3661.
 Refford, T.C. 6920.
 Reffstrup, T. 7463.
 Reffing, D.R. 5329.
 Regarat, F. 7470, 9086.
 Regav, S. 1219, 2148.
 Rejnath, B.R. 3094.
 Reguski, F.J., Jr. 2321.
 Rehaeck, Z. 5557, 5560, 6629.
 Rehm, H.J. 14, 4548.
 Rehm, H.J. 127, 1840, 1842, 2002, 5993, 7535.
 Rehm, J.N. 3882.
 Reich, A. 475.
 Reich, M.H. 931.
 Reichel, H. 4076.
 Reichelt, H.L. 6604.
 Reichenbach, H. 1653, 4412, 7257, 8880.
 Reichenbacher, D. 3543.
 Reichman, M. 7746.
 Reichenbach, H. 3433.
 Reicosky, D.C. 6993.
 Reid, C.P.P. 519, 556, 1485, 7810, 8671, 9505, 9558.
 Reid, I.D. 2880, 2902, 3763, 3770, 3778.
 Reid, J.H. 6332.
 Reifenshtal, G. 8880.
 Reifschneider, F.J.B. 2141, 4964, 7700, 9456.
 Reil, W.O. 1207.
 Reilly, C.C. 1214.
 Reimer, L.G. 9955.
 Reinbold, G.W. 832, 6670.
 Reiner, R. 7277.
 Reiner, J.A. 317.
 Reinhardt, D.J. 9823.
 Reinhardt, G. 3440.
 Reinhold, C. 4429.
 Reinhold, R. 3458, 2121.
 Remick, K. 7397.
 Reis, E.M. 3013, 9358.
 Reiser, R.F. 1110, 7644.
 Reissinger, O. 7816.
 Reiss, E. 9993.
 Reiss, J. 881.
 Reiss, J. 7625.
 Reiter, B. 5176.
 Reismeyer, R.A.F. 4566.
 Rekola, M. 817.
 Reiler, L.B. 9955, 9962, 9977.
 Remade, J. 2294, 9514.
 Remaudiere, G. 8360.
 Remberger, M. 2889.
 Remington, J.S. 3902.
 Remsburg, B.J. 7167.
 Remsen, C.C. 8088.
 Ren, G.-F. 5372.
 Ren, Z.Y. 9340.
 Renard, M.F. 130, 1994.
 Renaud, A.J. 8111.
 Renard, B.L. 4085.
 Rengan, B.S. 3056.
 Rengathan, V. 2901.
 Renner, E.D. 5377.
 Renner, G. 8789.
 Rennie, D.A. 2359, 6680, 9608.
 Rennie, J.A. 5129, 7661, 9587, 9608.
 Renoux, B. 8775.
 Resnais, E.R. 6028.
 Reppe, P. 3833.
 Reshetnikov, A.P. 3191.
 Reshetnikov, L.S. 1829, 2738, 45.
 Reshetnikov, L.S. 8413.
 Reshiov, L.N. 5418.
 Reshlov, K.E. 1830.
 Ressel, S.J. 9838.
 Restano, L. 3596, 4822.
 Retsema, J.A. 6133.
 Retsema, J.A. 81543.
 Rettich, F. 6069.
 Reuter, G. 9600.
 Reusser, F. 4419.
 Reutgen, H. 9018.
 Reutmann, H. 5463.
 Reutmann, E. 6708.
 Reuven, R. 1300, 3979, 5758, 7648, 7752, 9380.
 Revankar, G.R. 5212.
 Revello, M.G. 9853.
 Reverdy, M.E. 9957.
 Revilla, E. 1868.
 Revial, H.S. 5088.
 Rex, M.C. 4702.
 Reyes, C.A. 3822.
 Reyman, V.G. 2095.
 Reynaud, P.A. 6958.
 Reynolds, G. 5858.
 Reynolds, J.H. 2607.
 Reynolds, K.L. 334.
 Reynolds, P.H.S. 8694.
 Reynolds, S.L. 8533.
 Reznik, L.V. 2013.
 Reznik, S.R. 7922.
 Rhee, J.S. 7464.
 Rhen, M. 9062.
 Rhim, J.W. 7464.
 Rhodes, J.D. 9503.
 Rhodes, M.W. 6268.
 Rhodes, R.L. 9588.
 Riberio, C.D. 2687.
 Riberio, W.J. 6818.
 Riberiau-Gayon, P. 9243.
 Ribet, A.-M. 938.
 Riboldi, F. 493.
 Ricard, J.L. 6613.
 Ricca, J.M. 1609.
 Ricci, F. 85.
 Ricci, L.C. 5656, 5657, 9299.
 Riccardi, I.D. 5805.
 Rice, A.D. 459, 467, 3108.
 Rice, B. 6764.
 Rice, E.L. 8683.
 Rice, J.M. 4759.
 Rice, K.M. 3838.
 Rice, R.G. 3234.
 Rice, W.A. 3328, 8681.
 Rich, L.G. 1691, 1692, 6256.
 Richard, D. 3486.
 Richard, J. 4830, 7213.
 Richards, J. 1108.
 Richards, M.G. 1005.
 Richards, W.C. 4152.
 Richardsome, H. 710.
 Richardson, A.M. 7803.

Author Index

- Sade, N. 5173.
Sadihu, C. 856.
Sadiq, E.A. 1098.
Sadovskiy, Z. 8159.
Sadretdinov, S.M. 7237.
Sadykov, B.F. 577, 2373, 8689, 8690.
Saed, A.M.K. 491.
Saenger, H.L. 2982, 2983, 8529.
Saenz Gonzalez, M.C. 6021.
Saenz R., J.A. 8656.
Saenz, M.C. 1556.
Saez de Jauregui, G.M.M. 5305.
Safanov, T.B. 7052.
Safarik, I. 3570.
Safaula, K.M. 5011, 6954.
Safir, G.R. 4200.
Safirankova, M. 4351.
Safwat, M.S.A. 6045, 9143.
Sagai, H. 4415, 8886.
Sagawa, H. 6223, 8025.
Sagmann, W. 7221.
Sagi, M. 1894.
Sah, R.P. 7725.
Saha, B.C. 6456, 6498, 9230.
Saha, C.S. 1932.
Saha, S.K. 5922.
Sahai, R. 7649, 8539.
Sahakian, R.V. 8477.
Sahasrabudhe, N.A. 7564.
Sahasrabudhe, S.R. 6654.
Sahay, M. 3872.
Sahib, S.A. 6047.
Sahib, G.F. 3317.
Sahm, D.F. 9748.
Sahm, H. 1859, 2603, 6445, 9160.
Saikawa, I. 735, 3385, 7144.
Saikawa, M. 4519.
Saikawa, P. 8694.
Saindrenan, P. 4061.
Saini, L.C. 509, 2289.
Saini, S.S. 5811.
Saino, T. 8389.
Sainsbury, R.H. 3507.
Saito, A. 3385.
Saito, H. 3526, 4907, 7178, 8259.
Saito, J. 203.
Saito, K. 277.
Saito, O. 8362.
Saito, S. 4398.
Saito, Y. 4955, 6813, 8207.
Saitoh, M. 6313.
Sajid-Jimenez, C. 9218.
Saiz, A. 2894.
Sajad, S.M. 827.
Sakagami, Y. 915, 7161.
Sakaguchi, G. 1115, 7636.
Sakaguchi, K. 730, 3448.
Sakaguchi, S. 1862.
Sakaguchi, T. 4256.
Sakai, B. 232, 1068.
Sakai, B. 898, 9338.
Sakai, M. 3248.
Sakai, T. 29.
Sakakibara, H. 6204, 8886.
Sakakibara, Y. 8820.
Sakamoto, M. 1650, 6522.
Sakamoto, R. 3698, 3699.
Sakamoto, T. 3884.
Sakamura, S. 4161, 8521.
Sakano, Y. 1919, 1939, 2771.
Sakar, D. 7753.
Sakazaki, R. 3410, 6139.
Sakazawa, C. 6515.
Sakemi, S.-I. 7956.
Sakharovskiy, G.F. 1973.
Saksena, S.B. 8571.
Sakuma, H. 4437, 6288.
Sakuma, Y. 9847.
Sakuma, Y. 7996.
Sakurai, T. 6269.
Saladini, J.L. 5714.
Salama, H.S. 3888, 5559.
Salaninro, J.P. 9804.
Salant, L.F. 1290, 2197.
Salbeck, G. 5224.
Salcedo, J.R. 9028.
Saleem, Z.M. 1549.
Salehi Sormaghi, M.H. 2458.
Saleh, A.A. 702.
Saleh, J. 8066.
Saleh, M.A. 3966, 3988.
Saleem, P.M. 1498.
Salgado Filho, G. 6659.
Saliman, M. 1278.
Salimath, P.V. 8332.
Salimova, E.I. 2592.
Salini, P. 746.
Salsbury, P.J. 6657.
Salit, E. 6106.
Salivanchik, R. 6358.
Salinjoja-Salonen, M. 4446.
Sall, M.A. 1270, 7685.
Sall, A.K.J. 6248.
Salleh, A.B. 574, 6557.
Salleh, B.B. 9461.
Salmon, V. 3280.
Salimi, A. 1749.
Salinikow, J. 6494.
Salomaa, R. 5645.
Salomon, R. 9378.
Salonen, R. 1749.
Salonus, P.O. 5956.
Salas, L. 9506.
Salsac, L.E. 4517.
Salise, A. 4714, 4858.
Salt, G.A. 9333.
Salt, W.G. 2442, 6051, 7926.
Salte, R. 3855.
Salter, A.J. 8032.
Satter, L.F. 1100.
Satzmann, B.E. 4886.
Satzmann, H.A. 2392.
Sallu, A. 1889.
Salvadore, S. 4513.
Salvagaglio, L. 1723.
Salvatore, F. 6509.
Salventi, F. 9899.
Salyanov, A.I. 7971.
Salyers, A.A. 172, 2022, 3792, 4487.
Salzberg, S. 698, 9369.
Salzko, R. 9305.
Saman, E. 6436.
Samaranta, A.K. 3338, 5494.
Samaraweeera, I. 3858.
Same, B.I. 9576.
Samoliou, L.A. 8723.
Sampao, G. 9022.
Sampson-Scherer, J. 9715.
Sampson, P.J. 8528.
Sams, C.E. 8598.
Samsinakov, A. 7482.
Samson, R. 625.
Samson, R.A. 1783.
Samsonov, V.G. 6554.
Samsonova, T.M. 3279.
Samsonova, V.S. 1596.
Samysyina, G.N. 8804.
Samy, C.E. 1575.
Samuel, J.L. 8954.
Samykin, T.D. 3615.
Samyn, G. 2185.
San Juan, M.O. 1380.
Sanada, M. 8627.
Sanborn, M.P. 708, 6743.
Sanchez de S. Lorenzo, A. 757.
Sanchez-Diaz, M. 4234.
Sanchez, A. 44, 757, 2684.
Sanchez, S. 40.
Sanchez, Y. 4470.
Sancho, V. 2059.
Sand, C. 3409.
Sand, W. 7537.
Sanden, G.E. 1409.
Sander, I.L. 9508.
Sanders, C.C. 1677, 6143, 7155.
Sander, S. 8441.
Sanders, C.V. 5199.
Sanders, D.C. 6807.
Sanders, P.L. 1172.
Sanders, T.H. 2988, 5664.
Sanders, W.E. Jr. 1677, 7155.
Sanderon, K.E. 9052.
Sanderford, P.A. 9200.
Sandhu, D.K. 3678, 9286.
Sandhu, K.S. 329.
Sandline, W.E. 7580.
Sandstrom, R.E. 9900.
Sanekeita, T. 9856.
Sanfelieu, C.L. 5850.
Sanfelieu, L. 9882.
Sanfilippo, A. 1611, 5260.
Sanford, P. 4247.
Sankaran, R. 3810.
Sankawa, U. 38, 5493.
Sankhala, K. 7077.
Sannabhadhi, S.S. 6665.
Sano, A. 287.
Sano, Y. 8682.
Sano, S.T. 6505.
Santagati-Le Pors, M.J. 6103.
Santagati, A. 7092.
Santagati, M. 7092.
Santamaria, M. 7999.
Santamaría, P. 6509.
Santamaria, M.B. 3222.
Santikarn, S. 6211.
Santoro, M.G. 2485.
Santos, M. 2737.
Santos, J. 2932.
Sanyal, A. 1932.
Sanyal, G. 8756.
Sanyal, S.C. 2957.
Sanz Perez, B. 2402.
Sapetti, C. 2993.
Sapico, F.L. 773.
Sapsai, E.I. 6057.
Sapunova, L.I. 1866.
Sarafian, S.K. 3565.
Saragani, H. 4074, 4091.
Saralov, A.I. 2361.
Sararash, J. 6791.
Saravolatz, D.L. 3393.
Sardar, K.K. 3953.
Sardjana, K.W. 3591.
Sarel, S. 5208.
Sargae, P.M. 6181.
Sarhan, A.R.T. 411, 3128, 4107, 4108.
Sari, A. 6801.
Sarasiani, F.S. 7483.
Sanc, A. 5564, 6314.
Sardaris, H.C. 5605.
Sargis, S. 5943, 9599.
Sarkin, K.V. 9256.
Sarkar, A.K. 8491.
Sarkar, B.B. 3804, 4516.
Sarkar, C. 3793.
Sarkar, D. 4735.
Sarkar, F.H. 3366.
Sarkar, H.K. 7366.
Sarkar, J.M. 9133.
Sarma, S. 1122, 1238.
Sarma, S. 8110.
Sarnova, I.P. 6230.
Sarogak, D.J. 4100.
Sari, I. 3528, 6296.
Sarra, P.G. 4859.
Sarttuz, G. 1712.
Sartbaeva, U.A. 7070.
Sartucci, F.A. Jr. 3493.
Sarwar, M. 3985.
Sasahara, T. 4438.
Sasaki, J. 1981, 5552, 7417.
Sasaki, M. 2739.
Sasaki, S. 4649.
Scheid, N.W. 2824, 2827, 2828, 3716, 4424, 4570, 4615, 7448, 8109, 8166, 8417.
Sasaki, Y. 6097.
Sasatsu, M. 7035.
Sassa, Y. 8022.
Sasada, W. 3443.
Sasse, T. 6620, 6718, 8522.
Sassen, B. 8526.
Sasser, M. 5398, 9498.
Sasser, P.E. 4913.
Sastray, K.S.M. 9155.
Sastray, M.L. 6870.
Sastray, P.A. 4575.
Sastray, P.S.N. 9562.
Satapathy, M.K. 8613.
Satish, M. 9658, 9659.
Satta, M.N. 6946.
Sato, G. 9017.
Sato, H. 4181, 6720, 7450, 8521, 8523.
Sato, H.H. 9135, 9192.
Sato, I. 701.
Sato, J. 6763.
Sato, K. 122, 1479, 4594, 5686, 8621, 8624.
Sato, M. 964.
Sato, S. 1885, 5371.
Sato, Y. 6720, 8007, 8523.
Sato, A. 3716, 4570, 6322, 9781.
Sato, K. 7450.
Sato, T. 5125.
Sato, T. 1652, 4415, 6204, 8886.
Satom, T. 4396.
Satpathy, B. 7824.
Satre, M. 8268.
Satta, G. 92, 5249.
Sathyan, B.A. 448.
Satyaprasad, K. 5676.
Saucier, R. 6210.
Sauer, D.B. 443, 2236.
Sauer, F.D. 4857.
Sauer, M. 2750.
Schebeck, D. 5888, 5979.
Saunders, G. 9713.
Saunders, G.J. 7499.
Saunders, M.W.H. 3240.
Saups, S.G. 3556.
Saur, R. 8634.
Sava, R.J. 2310, 5871.
Savage, C. 859, 1606.
Savage, S.D. 7685.
Savageau, M.A. 7522, 7523, 7524.
Savell, J.W. 185, 261.
Savelyev, A.N. 6459.
Savelyev, E.P. 3547.
Saver, B.G. 83.
Savile, D.B.O. 3004.
Savin, V.R. 9665.
Savino, V. 338, 5782.
Savio, C. 9399.
Savitskaya, R.I. 7023.
Savluk, O.S. 2462.
Savio, D. 9718.
Savoldi, E. 4363.
Savon, L. 6682.
Savdra, J. 6384.
Savulian, C. 6238.
Sawa, K. 5518.
Sawa, T. 6152, 7449, 9778.
Sawada, H. 1825, 5525.
Sawada, K. 5245.
Sawada, M. 91.
Sawada, T. 2743, 9248.
Sawada, Y. 5114.
Sawai, T. 1610, 2810, 6087, 7180, 7883.
Sawaki, S. 4504.
Sawamoto, M. 7558.
Sawmney, R.N. 447, 1348.
Sawicki, R.M. 453, 467.
Sawyer, D.T. 4588.
Saxena, A. 4745.
Saxena, A.C. 2746, 5806, 8571.
Saxena, R.C. 7737.
Saxena, S.N. 635.
Saxena, V.K. 2131.
Saxinger, C. 3360.
Sayamov, R.M. 6713.
Sayler, G.S. 8421.
Sayre, R.M. 2848.
Sayuri, A. 9206.
Scadellian, M. 2741.
Scandella, C.J. 6589.
Scanlon, C.M. 7121.
Scanlon, J.C.M. 1360.
Scannell, J.P. 6197.
Scannenn, S. 9536.
Scardaci, S.C. 4959.
Scardi, V. 3827, 4513, 4532.
Scarlata, G. 8829.
Scarpioni, G. 7612.
Scarsi, G. 8023.
Scawen, M.D. 970, 7376, 8266.
Schad, N.W. 3971, 5471.
Schab, J. 8743.
Schablik, M. 738.
Schabot, J.C. 7613.
Schachnai, A. 1222.
Schaefer, J. 9931.
Schade, W. 3443.
Schaefer, C.H. 6599.
Schag, W. 6324.
Schaffer, F. 755.
Schaffel, G. 8493.
Schaffler, B. 4169.
Schaffner, R. 7395.
Schaffner, W. 3490.
Schaberger, G.E. 796.
Schall, R.A. 6765, 9363.
Schaller, K. 2465.
Schamhart, D.H.J. 6346.
Schander, R.G. 812.
Schneider, C. 2188.
Schaper, U. 3023.
Schappert, K.T. 3876.
Scharen, A.L. 3950, 4058, 4523.
Scharf, S.J. 1921.
Scharp, F.L. 4157, 5863.
Scharni, W. 4669.
Schatzmayr, H.G. 6261.
Schauf, V. 3418.
Schedel, M. 5267.
Scheffer, B. 5986.
Scheffer, R.J. 5794.
Schell, D.T. 3177.
Schell, J.S. 8173.
Schell, M.A. 6420.
Schell, R.F. 719, 6137, 9948.
Schell, S.L. 5641.
Schell, W.A. 692.
Schewenberger, W. 2782.
Schenck, N.C. 2332, 5200.
Schenk, I. 2950.
Scheper, H.T.A.M. 9487.
Schepers, R. 6292.
Schetter, H. 1760.
Schetsner, D.L. 5192.
Schick, D.G. 2534.
Schick, F.J. 1212, 5743.
Schick, H. 3801.
Schiele, U. 8233.
Schiehm, D.A. 8475.
Schiesler, A. 7137.
Schiffmann, J. 5945, 5946, 5947.
Schiffner, E. 3832.
Schild, G.C. 1758.
Schlidknecht, E. 6208.
Schilling, G. 8865.
Schilperort, R.A. 2202, 4488.
Schmel, J.P. 6902.
Schimpf, S.C. 4281, 6146.
Schinazi, R.F. 1741, 7101.
Schindler, J. 120, 3727.
Schingoethe, D.J. 7601.
Schink, B. 4660, 6336, 6645.
Schinner, F. 5969, 9556.
Schintu, M. 1712.
Schinzer, U. 3972.
Schioppacassi, G. 1611, 2561.
Schipper, D. 4405, 4406, 9779.
Schippers, B. 2349.
Schito, G.C. 3392, 8011.
Schlaak, M. 5373.
Schleef, R.R. 8513.
Schlegel, B. 3458.
Schlegel, H. 6730.
Schlegel, H.G. 4591, 4670, 6488, 8314.
Schleifer, K.H. 7388.
Schleser, G.H. 7215.
Schlesselman, P. 6493.
Schlicker, C. 5627.
Schlessbach, B. 4982.
Schlievert, P.M. 6706.
Schlingmann, M. 7536.
Schloesser, E. 1148, 1527.
Schloss, J.V. 6424.
Schlotter, H.A. 4733.
Schlub, R.L. 5792.
Schlumbohm, W. 6494.
Schmauder, H.P. 3867.
Schmid, E.N. 7060.
Schmid, R.D. 3727.
Schmidbauer, C.P. 8074, 8981.
Schmidli, J. 3618, 5367.
Schmidt, M.A. 5534.
Schmidt, B.H. 6644.
Schmidt, D. 359, 2573.
Schmidt, E.L. 425.
Schmidt, F. 7050.
Schmidt, J.W. 5306.
Schmidt-Lorenz, W. 5555, 3819.
Schmidt, N.J. 1756, 9932.
Schmidt, O. 3768.
Schmidt, R.A. 544, 2322.
Schmidt, R.D. 120.
Schmidt, R.H. 6346.
Schmidt, R.R. 5267.
Schmidt, B.H. 6644, 3749.
Schmidtke, N.W. 5306.
Schmitt, H.J. 259.
Schmitt, R. 4568.
Schmitt, R.A. 6760.
Schmitt, R. 589, 2194.
Schmitt, B. 7556, 7772.
Schmitt, C.K. 9855.
Schmuck, R.D. 4628.
Schneerson, R. 978.
Schneeweis, T.J. 6994.
Schneider, A. 919.
Schneider, C. 1279.
Schneider, D. 1963.
Schneider, H. 466, 2733.
Schneider, K. 4670, 8314.
Schneider, M.J. 7500.
Schneider, R.W. 4160, 6754.
Schneid, D. 471.
Schneider, L. 9855.
Schneider, M. 5890.
Schobert, S.M. 2603.
Schobert, L. 5321.
Schobert, R. 4819.
Schoenbeck, F. 1310, 2250, 6838, 8609.
Schoenberg, A. 9031.
Schoenberger, M.M. 520.
Schoenborn, C. 1591.
Schoenher, M. 8535.
Schoeneweiss, D.F. 5079.
Schoenheyder, H. 8153, 8154.
Schoen, J.L. 229.
Schoenknecht, F.D. 2547.
Scholl, H. 5556.
Schonberger, S.B. 1710.
Schongalla, A.W. 8193.
Schonhar, S. 4788.
Schonhorst, M.H. 3913.
Schononen, M.P.M. 5836.
Schor, E. 7965.
Schott, M.D. 1381.
Schoub, B.D. 759, 3355.
Schradler, L.E. 5828.
Schramm, R.W. 5938.
Schreiber, A.F. 8718.
Schreiber, H. 704, 4892.
Schreibtrunner, A. 3394, 7075.
Schroeder, A.L. 4511.
Schroeder, B.K. 5732.
Schroeder, D. 5982.
Schroeder, D.B. 3189.
Schroeder, H. 9619.
Schroeder, K.-L. 1993.
Schroeder, M.J.A. 2913, 8500.
Schroeder, T. 2573.
Schroeder, U. 827.
Schroeter, G. 3939, 7075.
Schroth, M.N. 403, 1202, 1227.
Schubert, K.R. 8694.
Schubert, M.L. 357.

- hubert, T. 8912.
hubert, W.W. 8486.
huck, H. 4178.
hugel, K. 5592, 6349, 6353.
7365, 8084, 8254, 9070, 9971.
9973.
huelser, S. 4384.
huethe, H. 6337, 6445.
huck, H.J. 7281.
huh, M. 4895.
hul, G. 5395.
hulm, M. 3972.
hult, G. 1945.
hult, F.J. 3067.
hult, G.A. 6803.
hult, R.A. 5189.
hult, R.D. 3613.
hult, W.D. 8851.
hult-Harder, B. 4689.
hult, A. 8743.
hult, H. 4589.
hult, C.P., Jr. 5032.
hult, D. 7532.
hult, E. 7309.
hult, H. 7235.
hult, D. 2580.
hult, H. 8529.
hult, M. 5545.
hult, A. 8082.
hult, T. 6164.
hult, G. 312, 1198, 2271.
5818, 6886, 8641.
hult, H. 9965.
hult, E. 5197.
hult, B.S. 5596.
hult, S. 4209.
hult, W.F.S. 437.
hult, O. 5619.
hult, A.C. 2007.
hult, H. 7362.
hult, H.F. 6863.
hult, J.H. 7404.
hult, F. 8790.
hult, R. 1486.
hult, R.H. 647.
hult, W. 3255, 3256.
hult, J. 8117.
hult, M. 677.
hult, M. 4050.
hult, S. 3801.
hult, U. 1984.
hult, J. 3320.
hult, R. 1264.
hult, R.D. 5550.
hult, H. 4893.
hult, R. 8670, 9816, 9817.
hult, H. 3539.
hult, K. 8170.
hult, K. 6156.
hult, A. 6074.
hult, H. 7421.
hult, W. 5781.
hult, F.J. 4544.
hult, C. 8815.
hult, J. 7283.
hult, R. 7407.
hult, O. 864, 3515.
hult, A.I. 8846.
hult, E. 4500.
hult, E. 5177.
hult, G. 3880.
hult, G. 1168, 4092.
hult, H. 6733, 6738.
hult, H. 8420.
hult, V. 1744.
hult, K. 2388, 6832.
hult, P. 9367.
hult, R. 8754.
hult, R.I. 2357, 8058, 9629.
hult, R.J.D. 2703.
hult, W. 5231.
hult, R. 7183.
hult, J.M. 4943.
hult, R.K. 5187.
hult, N. 9283.
hult, M. 8321.
hult, R. 7142.
hult, R. 2753.
hult, R.W. 9097.
hult, J.P. 9731.
hult, G. 1475.
hult, E. 3033.
hult, K.J. 4758.
hult, C. 428.
hult, J.H. 5334.
hult, L.M. 5761.
hult, M. 6596.
hult, J. 9827.
hult, D. 5382.
hult, A. 9464.
hult, O.K. 5441.
hult, J. 3942.
hult, A. 1461.
Sechler, D.T. 3544, 1164.
Secor, G.A. 1251.
Secor, J.B. 9559.
Sedell, R. 5122.
Sedgwick, A.K. 9911.
Sedky, K.A. 2922.
Sedlakova, J. 2500, 3487.
Sedlaczek, L. 3704.
Sedlar, L. 7049.
Sedlmayr, P. 7187, 8885.
Sedlmayr, V. 4351, 5240.
Sedova, H. 3745.
Sedova, N.N. 9278.
Sedova, N.N. 6181.
See, G.K. 1259.
See, L.S. 2316.
Seeberg, A.H. 7036.
Seebers, R. 5105.
Seeira, J.S. 4615.
Seeley, N.D. 795, 2649, 4020.
Seeley, S. 9275.
Seeuwer, E. 3023.
Seeman, M. 2065.
Seela, R. 7335, 7542, 8211, 8313.
Segal, J.J. 1566.
Segawa, T. 4655.
Segel, L.A. 7265.
Segers, L.C. 6871.
Segovia, R. 7823.
Segre, A.L. 8861.
Segre, D. 5434.
Segre, M. 5434.
Segui, M. 8314.
Segura, C. 745.
Seghal, H.S. 3103.
Seghal, O.M.P. 1154.
Seghal, O.P. 354, 4094.
Seghal, S.N. 6209, 6210.
Sei, Y. 7367.
Seibert, G. 2787, 8779.
Seibold, R. 5625.
Seibold, G. 1166.
Seichert, L. 3642, 3644.
Seidach, N.G. 2955, 6722.
Seidenfeld, S.M. 1569, 3308.
Seidler, R.J. 1533, 2624, 2949, 7254, 8136.
Seif-Elnasr, H.I. 5670, 5675.
Seif, A.A. 1314.
Seifert, H.S.H. 6321.
Seigler, D.S. 3556.
Seiler, H. 8060.
Seiler, J.R. 555.
Seiler, W. 5917.
Seino, A. 2567.
Seitz, J. 9312.
Seitz, L.M. 5720.
Seivert, B. 5015.
Sekhon, K.S. 5708.
Seki, S. 5500.
Seki, T. 8402.
Seki, S. 5827.
Sekiguchi, J. 6690.
Sekita, S. 7454.
Sekiya, T. 8009.
Sekizaki, T. 2515.
Sekizawa, T. 8965.
Sekizawa, T. 7746.
Sekizawa, T. 7884.
Seldel, L. 3285.
Seldin, L. 5961.
Seleznova, A.A. 7342.
Seleznova, T.I. 5543.
Selga, S.E. 9110.
Selina, A.V. 2460.
Selitrennikov, C.P. 5440.
Selkon, J.B. 2431.
Selstedt, A. 3220.
Seltman, M.A. 5649.
Selvakumar, P. 2658.
Selway, J.W.T. 6074.
Selwyn, S. 2544, 6182, 6305, 9701.
Selznay, A.S. 8873.
Semenuk, G. 8532.
Semenov, V.F. 9231.
Semenova, E. 2563, 2564, 4394, 6183.
Semenova, N.P. 1583, 9686.
Semenyuk, T.N. 9692.
Semenyuk, L.I. 2444.
Semina, N.A. 5396, 8804.
Seminon, O. 1542.
Sen Gupta, A.K. 5223.
Sen Gupta, P.K. 9348.
Sen, A. 5121.
Sen, B. 2214.
Sen, C. 650, 1570.
Sen, G.C. 7113, 9699.
Sen, S.K. 1810, 7284, 7866.
Senda, M. 6518.
Sengupta, A.K. 5186.
Sengupta, S. 13.
Sengupta, S.R. 869.
Senior, B.W. 8882.
Senn, H. 3643, 3653.
Senn, S.J. 3765.
Seno, E.T. 6196, 6212, 7310.
Sentenac, A. 4599.
Senterfil, L.B. 6092.
Senterfil, G.F. 2610.
Seon, M. 9741.
Seong, B.-L. 2766, 2802.
Seong, B.L. 6165.
Sephers, A.B.J. 3557.
Sepetov, F.F. 7348.
Seppe, L. 5352, 8994.
Seprenen, E. 5810.
Sepulchre, A.M. 3416, 6158.
Sequeira, L. 2269, 3127, 5833, 9989.
Serafim, M.B. 9307.
Serageva, T.I. 2964.
Sergeichuk, M.G. 1902, 7559, 7958.
Sero, C. 4786.
Serizawa, N. 7552, 8455, 8872.
Serizawa, S. 8455.
Sermoni, G. 1594.
Serokowa, D. 820.
Serov, D.D. 2460.
Sera, L.I. 2549.
Serrahima-Ziegler, M. 2833.
Sert, K. 7152.
Servizi, J.A. 6657.
Seshadri, C.V. 3056.
Seshadri, P.S. 9658, 9659.
Sestito, O. 1050.
Sestito, M. 9991.
Seth, R.P. 8388.
Sethunathan, N. 2897, 7007, 9620.
Setlow, P. 1878.
Seto, H. 764, 765, 2567, 2578, 2827, 2828, 2829, 3716, 4424, 4570, 4904, 5542, 6192, 7163, 8029.
Seto, M. 6153, 8668.
Setterstrom, J.A. 6052.
Setti, C. 7062.
Seuvre, A.M. 237.
Sever, J.L. 9839, 9839, 9938.
Severance, P.J. 3632.
Severin, E.S. 5957.
Severnets, L. Ya. 1654.
Severnets, L. Ya. 8897.
Sevour, R.J. 5533, 6570.
Seward, J.F. 3997.
Sewell, G. 5141.
Sewell, L.M. 5718.
Sexstone, A.J. 5110.
Seymour, C.P. 5741.
Seyyed-Hoseyni, M. 7802.
Shaara, R. 2693.
Shabalina, S.V. 5396.
Shabani, S. 2122.
Shabi, E. 5152, 5835, 7051, 7900.
Shadduck, J.A. 4711.
Shade, F.J. 785.
Shadmoor, S. 7938.
Shaffer, R. 7058.
Shafizadeh, F. 9256.
Shah, D.B. 4903.
Shah, P.M. 2510, 4358.
Shah, S.R. 7459.
Shahani, K.M. 214, 7591.
Shahdullah, M. 2835, 8754.
Shailubhai, K. 3774, 6649.
Shakhparonov, M.I. 1911.
Shalabi, S.I. 3823.
Shalis, P.J. 9909.
Shalla, T.A. 2158.
Shamash, S. 9559.
Shambo, T. 4674, 6404.
Shamsutdinova, K.Kh. 9279.
Shandera, W.X. 2958.
Shane, B. 67.
Shane, W.M. 8570.
Shaner, G. 6748.
Shanholzer, C.J. 9940.
Shani, U. 9380.
Shankaranarayan, R. 8846.
Shanker, J. 5922.
Shanker, K. 2476.
Shanker, S. 1082, 3383, 4292.
Shankar, M. 7475.
Shankley, M.S. 2758.
Shannmuganathan, N. 2160.
Shannon, L.H. 8987.
Shannon, K. 2550, 4378.
Shannon, W.M. 5214.
Shantha Kumar, S.L. 3281.
Shao, F.X. 4030.
Shao, H.-X. 821.
Shao, J.E. 3407.
Shapiro, R. 5989.
Shapiro, B.L. 866.
Shaposhnikov, G.I. 8199.
Shapovalov, B.S. 9255.
Shar, P. 7531, 8403.
Sharif, M.R. 3210.
Sharipova, F.R. 8284.
Sharkas, M.S. 2879.
Sharma, A. 7928, 8442, 8483.
Sharma, A.K. 5806.
Sharma, A.N. 2416.
Sharma, B.D. 7764.
Sharma, B.P. 4619.
Sharma, B.R. 3116.
Sharma, D. 5038.
Sharma, D.K. 4800.
Sharma, G.S. 621.
Sharma, H.S. 3019.
Sharma, I. 3152, 5817, 6350, 6735.
Sharma, J.K. 4178, 4929.
Sharma, K.G. 2230.
Sharma, K.S. 4307, 8788.
Sharma, M.C. 2557.
Sharma, M.M. 7077.
Sharma, M. 2319.
Sharma, O.K. 3360.
Sharma, O.P. 3076, 3116, 5408, 9138, 9176.
Sharma, P.B. 8008.
Sharma, N. 8779.
Sharma, R. 2238, 3099.
Sharma, R.C. 8784.
Sharma, R.D. 2416.
Sharma, R.K. 2497.
Sharma, S. 8773.
Sharma, S.C. 2131.
Sharma, T.D. 7854.
Sharma, S.K. 3153.
Sharma, S.R. 5673, 5691, 5808, 5813, 5832, 9445.
Sharma, V.C. 407.
Sharma, V.K. 8878.
Sharma, Y.R. 1159, 5726.
Sharp, C.Q. 256.
Sharp, E.L. 1349, 2121, 5703.
Sharp, M. 7189.
Sharp, R.N. 256.
Sharpe, A.N. 3512, 3575, 8138.
Sharpe, A.S. 3713, 4700.
Shatki, L.E. 1654.
Shatla, M.N. 5957.
Shatrova, V.M. 1629, 7071.
Shatlock, R.C. 4045, 4115.
Shavlovsky, G.M. 7351.
Shaw, G. 3397.
Shaw, G.C. III. 5300, 6894.
Shaw, D.H. 6577.
Shaw, E.J. 1604.
Shaw, E.K. 6589.
Shaw, J.-F. 6536.
Shaw, J.G. 3041.
Shaw, P.J. 7719.
Shaw, W.V. 9649.
Shawky, B.T. 9583, 9607.
Shay, B.J. 5635.
Shebeliykina, L.V. 5520.
Shechedin, L.V. 1774.
Shechelovska, O.N. 1770, 9869.
Shechekina, T.A. 1774.
Shechelovska, E.V. 1972, 6626.
Shecherbakova, T.A. 4215.
Shecherbakova, V.K. 1983.
Shchesnyuk, D.A. 9892.
Shchitsina, M. 2428.
Shchurova, Z.P. 9189.
Shea, S.R. 539, 9523.
Shealy, Y.F. 5214.
Sheard, P.J. 3828.
Shearer, B.L. 8652, 9523.
Shearer, G. 1511.
Shearer, G.B. 3210.
Shearer, M. 7109.
Sheehan, D.J. 6012.
Sheehy, J.E. 6984, 9589.
Sheena, A.T. 816.
Shelton, G. 1062, 5633, 5634.
Shelab, Z. 3491.
Shehata, A.E. 7578.
Shehata, M.A. 9328.
Shehata, S.A. 2615.
Shehata, S.M. 5919, 5927.
Sheichenko, V.I. 1647, 6234, 7160.
Sheina, E.P. 7967.
Shekarchi, I.C. 9836.
Shekhovtsev, V.P. 628.
Shekhovtsov, A.G. 9988.
Shelabotin, G.P. 1345.
Sheldron, R.I. 72.
Sheldrake, R.F. 4462.
Sheldrick, W.S. 5529.
Shelly, D.C. 9044.
Shelton, D.R. 4760, 8941.
Shelton, P.G. 811.
Shen, D.T. 5369.
Shen, G.-J. 6573.
Shenbagamurthy, P. 7170.
Shende, S.T. 3194, 3195, 4232, 4233, 7800.
Shenin, Yu.D. 2559.
Shenton, A.J. 5034.
Shepard, M.C. 9871.
Sheplevtseva, N.G. 7166.
Shepherd, M.G. 58.
Shepherd, M.J. 6687.
Shepherd, T. 1754.
Shepherd, R.K. 4126.
Shepherd, R.L. 7732.
Sheppard, M. 7247.
Shepro, D. 8513.
Sherald, J.L. 9515.
Sherm, R.J. 5354.
Sherma, E.P. 7068.
Sherrard, J.H. 5307.
Sherma, J. 5547.
Sherstobitova, T.S. 8870, 8871.
Sherwood, J.E. 1548.
Sherwood, J.L. 9409.
Sherwood, R.F. 970.
Sherwood, R.T. 3101, 6868.
Sheth, N.K. 9822.
Shetty, A. 5011.
Shetty, H.S. 5011.
Shevchenko, A.A. 9716.
Shevchenko, S.I. 7793.
Shevchuk, M.I. 7921.
Shevchenko, L.A. 371.
Shevtsova, V.M. 6796.
Shew, H.D. 324, 5872, 9393.
Shewen, P.E. 8518.
Shiao, M.-S. 7164.
Shians, M.P. 3577, 5145.
Shiao, H. 123.
Shibaev, V.N. 8333.
Shibamoto, N. 5539.
Shibasaki, I. 271, 1587.
Shibata, M. 1525, 1568.
Shibata, S. 9190.
Shibata, T. 9783.
Shibata, U. 2586.
Shibukawa, M. 6627.
Shick, R.A. 1733.
Shieh, W.K. 1688, 4433.
Shields, P.A. 3469.
Shier, W.T. 8502.
Shifrina, S. 5018.
Shiga, Y. 6539.
Shigematsu, M.L. 9679.
Shigeta, S. 5211.
Shih, S.-C. 207.
Shio, T. 7452.
Shio, Y. 2390, 2725.
Shima, S. 8338.
Shimada, K. 2451.
Shimadzu, K. 2450.
Shimamoto, T. 6691.
Shimamura, Y. 55, 7411.
Shimazaki, T. 5125.
Shimazu, A. 765, 2827, 5542, 7163.
Shimizu, H.I. 6013.
Shimizu, H. 250, 3354, 6190.
Shimizu, K. 1377.
Shimizu, K. 8903.
Shimizu, K.-I. 1668, 8344.
Shimizu, M. 5190.
Shimizu, M.T. 6096.
Shimizu, N. 789.
Shimizu, N. Ya. 5601, 6621, 6624, 7496, 8167, 9214.
Shimizu, T. 9781.
Shimizu, Y. 1577.
Shimojima, Y. 6627.
Shimomura, O. 7294.
Shimomura, T. 1377.
Shimomura, Y. 4915.
Shimomura, T. 7751.
Shin-Watanabe, T. 7306.
Shin, M. 8030.
Shin, S.J. 862, 8934.
Shinohara, K. 5442.
Shinagawa, E. 955, 1828, 3683, 4603, 4609.
Shinagawa, H. 4553.
Shinagawa, K. 1115.
Shinagawa, M. 9017.
Shinagawa, S. 1667, 1683, 2461, 9786.
Shine, J. 1509.
Shine, P.J. 1795.
Shinji, A. 5370.
Shinke, R. 3786, 5428, 7317, 8301.
Shinmoto, H. 6365.
Shinmura, A. 8299.
Shinoda, S. 3552.
Shinomiya, T. 1885.
Shinriki, N. 1592.
Shintani, H. 9707.
Shintani, M. 8109.
Shinya, R. 255.
Shioiri, Y. 7035.
Shiota, H. 5134.
Shioya, S. 3818, 5359.
Shipe, W.F. 263.
Shipton, P.J. 379.
Shirafuji, H. 3700, 5164.

Author Index

- Shirahama, H. 4907.
Shirahata, K. 1671, 6169.
Shirai, A. 9664.
Shirai, T. 6389.
Shirashi, A. 9790.
Shiraki, K. 7897.
Shrata, A. 4084.
Shrobovok, V.P. 3523.
Shroza, T. 764, 785, 2578.
Shirazi, M. 2456.
Shuan, M.H. 3554.
Shryaeva, L.I. 6102.
Shshchenko, L.D. 6171.
Shishiyama, J. 6840.
Shishika, G.V. 9692.
Shishio, V.I. 1920.
Shivakumar, T.S. 3018.
Shivashankar, G. 446.
Shive, W. 2843.
Shlaes, D.M. 9960.
Shmakova, Z.F. 3547.
Shmida, V.A. 7876.
Shneider, M.A. 7941, 8667.
Shobukhov, V.M. 1546, 7949, 9635.
Shobukhov, T.S. 7236.
Shockman, G.D. 5239, 7133, 8334.
Shoeb, A. 6009.
Shoemaker, S. 9146.
Shogren, M.D. 240.
Shoham, H. 5667.
Shoham, Y. 8424.
Shoji, J. 6139.
Shoji, J.I. 3410.
Shokas, D.E. 409.
Shokr, E.-S. 9598.
Sholberg, P.L. 4777, 5801, 8600.
Shomura, T. 2586, 6136.
Shonnard, J. 9902.
Shonkan, O.O. 9660.
Shor, R. 698.
Shoor, I. 3698.
Shopova, M. 89, 90.
Shornikova, M.V. 6237.
Shorte, W.C. 8648.
Shotts, E.B., Jr. 665, 7595.
Shots, R. 8750, 8765.
Shottwell, O.L. 2948, 4886.
Shrinivas, R.A. 310.
Shrivastava, A.K. 7645.
Shritani-Margolina, V.A. 1163.
Shstibans, E.B. 7941.
Shub, G.M. 726.
Shub, T.A. 6058.
Shubukova, V. 2309.
Shudo, K. 4309.
Shugalei, L.S. 6892.
Shukla, D.D. 3043.
Shukla, D.N. 5804.
Shukla, G.N. 2497.
Shukla, I.C. 7854.
Shukla, N.P. 9682.
Shukla, P.K. 7939.
Shukla, T.P. 3839.
Shukla, V.D. 368, 1156, 4951.
Shulga, A.V. 8324.
Shulgovskaya, E.M. 8859.
Shull, V.H. 9784.
Shulman, M. 2445, 7057.
Shumaker, J.R. 3112.
Shungu, D.L. 2455, 3324, 4426, 9672.
Shurtz, R. 698.
Shutakova, G. 2309.
Shvaiova, I.A. 4375, 6140.
Shved, A.D. 2444.
Shvets, V.N. 9231.
Shyer, M.L. 9825.
Sibley, D. 6437.
Siboe, G.M. 7680.
Siddaramaiah, A.L. 2082, 2277.
Siddaramaiah, V.K. 2360.
Siddiqui, Mirza, M. 7662, 7697.
Sidiq, M.H. 1507.
Siddiqui, Q. 5351.
Siddiqui, S.A. 561.
Siedbottom, C.M. 8279.
Sidelnikova, L.I. 8199.
Sidhu, G.S. 5811, 6854.
Sidle, R.C. 6894.
Sidor, C. 5564, 6313.
Sidorchuk, I.I. 703, 7921, 7923, 9700.
Sidiorenko, L.P. 2004.
Siebeling, R.J. 6259.
Siebenlist, K.R. 9149, 9173.
Sieber, M. 9159.
Siebert, F. 4554.
Siebor, E. 6125.
Sieburth, J.M. 3467.
Siegel, B. 9969.
Siegel, B. 9628.
Siegel, E.R. 2840.
Siegel, M.L. 2783, 3734.
Siegel, S.L. 2807.
Siegel, M.R. 2135, 4954.
Siegel, S. 9969.
Siegel, S.M. 9628.
Siegnst, T.W. 5312.
Siekerka, G.L. 8952.
Siemann, R. 4179.
Sierra, M.F. 6089, 9009.
Sietsma, J.H. 1955.
Siewinski, A. 8435.
Sigda, J. 1793.
Sigee, D.C. 482, 4980, 5787, 6790.
Sigora, L.J. 5976, 5985, 6242, 8951.
Sigora, R.A. 8612.
Sikitya, B. 3636, 7539, 9137.
Silaev, A.B. 1642, 3326, 6237.
Silanogol, J. 4351, 7146.
Silbernagel, M.J. 5690.
Siliker, J.H. 230.
Sillinger, V. 2929.
Sills, A.M. 3691.
Silman, R.W. 9227.
Silisbury, J.H. 6242.
Siltanen, H. 5972.
Silva, H.J. 7823, 9118.
Silva, J. 9673.
Silva, W.M. 2258.
Silveira, A.P. 5628, 2291.
Silver, S. 662.
Silverman, R.H. 3345, 9690.
Silverstri, M.C. 4514.
Silvestre, W.B. 516.
Sim, I.S. 3357.
Sim, F. 6238.
Sim, H. 6714.
Simard, M.R. 5613.
Simard, P. 2532.
Simard, R.E. 4833.
Simberloff, M.S. 6037.
Simkin, J.H. 8854.
Simkovicova, M. 4507, 8721.
Simml, M.M. 8785.
Simmons, C.W.R. 199.
Simmons, G.M., Jr. 1475.
Simmons, R.L. 2698.
D.H. 9965.
Simon-Sylvestre, G. 4253.
Simon, B.M. 624.
Simon, E.H. 7103.
Simon, H. 10, 7281.
Simon, I. 2166.
Simone, G.W. 9426.
Simonetti, N. 7082.
Simons, L.K. 7667.
Simons, K.M. 726.
Simons, M.D. 5035, 9338.
Simons, S.D. 5610.
Simoons-Smit, A.M. 8137.
Simova, E. 7710.
Simpon, A.M. 2415.
Simpon, E.J. 8293.
Simpon, G.W. 3084.
Simpon, I.N. 7878, 8292.
Simpon, L.M. 8369.
Simpon, M.L. 3444.
Simpon, R.B. 9903.
Simpon, T.M. 4698, 6692, 6699.
Sims, J.J. 2401.
Sims, J.L. 2671.
Sims, R.C. 2602.
Sinclair, J.B. 1434, 2285.
Sinclair, J.B. 4939, 4942, 5059, 5821, 5826, 7660.
Sinclair, N.A. 8400.
Sinclair, T.R. 5962.
Sinclair, W.A. 3171, 3173, 4144.
Sindar, P. 3294.
Sindelar, L. 2183.
Sindhu, J.S. 4062.
Sinegre, G. 294, 295, 296.
Singal, E.M. 1670, 6107.
Singaravadi, K. 7588.
Singaravadi, N. 4085.
Singer, A. 5989.
Singer, S. 1023, 2858.
Singer, R.H. 638.
Singh, A. 1084, 3006.
Singh, A.K. 6876, 7649.
Singh, B.K. 7717.
Singh, B.P. 3066.
Singh, C. 79, 1907.
Singh, C.S. 1900, 2226, 2369.
Singh, D. 329, 370, 1159, 1161, 5022.
Singh, D.B. 3146.
Singh, D.V. 2557.
Singh, H. 3141, 3142, 4307, 8788.
Singh, H. 4123, 7663, 8637.
Singh, H.D. 4222, 9632.
Singh, H.N. 6770.
Singh, J. 2583, 3848, 4800, 6664, 8200.
Singh, K. 4198, 6209.
Singh, K.B. 6887.
Singh, K.P. 4062.
Singh, K.V. 3630.
Singh, L. 2205, 5671.
Singh, M. 6657.
Singh, M.P. 9054.
Singh, N. 2903, 3252, 4198.
Singh, N.B. 5712.
Singh, P. 1738, 2557, 3874, 6044.
Singh, P.D. 1609, 7145.
Singh, P.J. 7755.
Singh, R. 8534.
Singh, R.A. 1188, 2233, 5699.
Singh, R.B. 2255, 4064, 7663.
Singh, R.J. 3459.
Singh, R.L. 9276.
Singh, R.M. 2255.
Singh, R.P. 1243, 2157, 5671, 8101, 9422.
Singh, R.R. 7849, 8539.
Singh, R.S. 3252.
Singh, S. 5878.
Singh, S.D. 621, 5807, 9502.
Singh, S.J. 1231, 2196, 2206, 6911, 6917, 6930, 9434.
Singh, S.K. 4951, 7933.
Singh, S.N. 2654, 4963, 8096.
Singh, S.P. 6082, 6983, 7960.
Singh, T. 5022.
Singh, U.P. 510, 4123, 7663, 8637.
Singh, V.P. 561, 2557.
Singleton, A. 7576.
Singleton, F.L. 9258, 7254.
Singleton, P.W. 537, 7830, 7833.
Sinha, A.B. 9439.
Sinha, A.K. 2292.
Sinha, A.M. 6018.
Sinha, K.K. 3874.
Sinha, R.C. 8537.
Sinha, R.P. 3926.
Sinha, R.N. 2062, 6666, 8600.
Sinha, S.N. 1932.
Siniolova, G.K. 7968.
Sinityn, A.P. 99, 3676, 6653, 6448, 8445.
Sinityn, V.P. 101.
Sinkule, J. 9007.
Sinyagina, O.P. 8020.
Sinyak, L.I. 9811.
Sinzig, G. 863.
Sipach, G. 3832.
Sivara, R. 8288.
Sirois, J.C. 7857.
Sirotti, D.A. 7324.
Siska, T.S. 8762.
Siskin, S.B. 6002.
Sisler, H.D. 1595.
Sisson, P.R. 2431.
Sitarama Raju, K. 493.
Sitch, L. 4043.
Sitton, J.W. 9373.
Sitvapal, K. 2324.
Sitvarama, Sastri, K. 7906.
Sitvarama, G. 7033.
Sitvarama, H. 6634.
Sitvathamparam, K. 2153.
Sivasthi, J. 8935.
Sivov, I.G. 7069.
Sjastad, K. 3620.
Skene, G.M. 469.
Skogren, R.E. 9645.
Sjolin, L. 7399.
Sjulin, T.M. 9371.
Skachova, H. 3671.
Skalka, B. 6224.
Skarmoutsos, G. 540.
Skarstad, K. 6339.
Skau, K. 8105.
Skelses, J.K. 6302.
Skeeters, J.L. 1511.
Skellington, R.A. 603.
Skene, G.M. 469.
Skerman, V.B.D. 4844.
Skiba, U. 3180, 6955.
Skicki-Mullen, M.B. 7108.
Skillem, J.K. 9043.
Skinner, A.J. 6560.
Skinner, J.A. 8186.
Skinner, R.H. 638.
Skinner, R.H. 1521.
Skipp, R.A. 327, 350, 554, 5692.
Skira, J.J. 6623.
Skjelvaie, R. 2056.
Skjoten, F. 738.
Skjodnev, A. 9111.
Skoldenberg, B. 6075.
Skolmowska, U. 3836.
Skotland, C.B. 1299, 3087.
Skotnicki, M.L. 1788, 7507.
Skuray, R.A. 7029.
Skuray, J.J. 9851.
Skware, A.Z. 6077.
Skwarek, P. 2438.
Slabas, A.R. 8279.
Slabaugh, W.R. 1328.
Slack, R.C.B. 2430, 8754.
Slack, S.A. 6829.
Sladdin, M. 7773.
Slater, J.H. 2884, 3635.
Slater, N.K.H. 4456, 9884.
Slattery, R.J. 7807.
Slaughter, G.W. 1451.
Slavik, J. 8169.
Slavik, M.F. 6302.
Slavin, A.A. 6170, 6230, 8662.
Slee, A.M. 3325, 5222.
Sleesman, J.P. 2688.
Slepak, M.E. 6473.
Sleper, D.A. 357.
Sleytr, U.B. 7930.
Slezarik, A. 8251.
Sliz, A. 9846.
Slininger, P.J. 135, 8374.
Slirkard, A.E. 4062.
Sloan, G.L. 2793.
Slovak, M.E. 7437, 8198.
Sloger, C. 6987, 8533, 8695.
Slovakoska, L.S. 5554.
Slonim, V.Z. 770.
Slooff, W. 2874.
Slomans, L. 9711.
Slonarek, M. 9703.
Slots, J. 8814, 9906.
Slusarenko, A.J. 8540.
Sly, T. 213.
Slyusarenko, A.G. 6471.
Small, D.A. 5376.
Smart, E. 2622.
Smalley, D.L. 2512.
Smalley, E.B. 1167, 3945.
Smalheiser, J.M. 2822.
Smallwood, B. 9977.
Smart, G.C., Jr. 3112.
Smart, E. 2622.
Smeal, D. 9559.
Smeds, A.-L. 3733, 7325.
Smeed, F.D. 5217.
Smeikal, F. 7944.
Smeikal, F. 3658.
Smetzer, D.C. 4155, 8659.
Smet, M.L. 2114.
Smiley, K.L. 8374.
Smillie, L.B. 4575.
Smillie, R.C. 5343.
Smilow, P.C. 5343.
Smirnov, P.M. 3436.
Smirnov, V.V. 1645, 2443, 7922, 8895.
Smirnova, E.A. 47.
Smirnova, G.A. 5366.
Smirnova, T.A. 35, 661.
Smirnov, G. 7033.
Smit, J.D.G. 960.
Smith, A.G. 2989, 9958.
Smith, A.K. 5462.
Smith, B. 1776.
Smith, B.E. 5523.
Smith, B.J. 1258.
Smith, B.M. 7935.
Smith, B.R. 3367, 6137, 8778.
Smith, C.A. 8796.
Smith, C.J. 1830, 8703.
Smith, D. 4540, 6345, 6347.
Smith, D.A. 345, 4801, 5307.
Smith, D.B. 993, 8627.
Smith, D.H. 5464.
Smith, D.K. 7884.
Smith, D.W. 7879.
Smith, E.S.C. 1417.
Smith, F.A. 559, 6997.
Smith, G. 185, 217, 231, 261.
Smith, G.M. 6216.
Smith, G.R. 40, 7829, 7847.
Smith, G.S. 2332, 3955, 4803.
Smith, H. 835, 9121.
Smith, H.W. 2637, 9315.
Smith, I.M. 1360, 2000, 4028.
Smith, I.W. 8653.
Smith, J.A. 1602, 8863.
Smith, J.D. 3494.
Smith, J.K. 3542.
Smith, J.L. 264, 2667, 4816.
Smith, J.M.B. 7273.
Smith, J.W. 1569, 3308, 6250.
Smith, K.L. 6343.
Smith, K.O. 1572, 7099.
Smith, P. 9938.
Smith, P. 5227.
Smith, R.C. 459, 9688.
Smith, M.G. 149.
Smith, M.J. 6355.
Smith, M.P.W. 1705.
Smith, M.W. 5049.
Smith, O.L. 5448.
Smith, R.A. 306, 3561.
Smith, R.J. 6630.
Smith, R.J., Jr. 1285, 2835.
Smith, R.L. 7543.
Smith, R.M. 504.
Smith, R.P. 2505.
Smith, R.S. 5059.
Smith, R.V. 7487.
Smith, S. 3483, 8759.
Smith, S.A. 3375.
Smith, S.E. 559, 5476, 6942, 6997.
Smith, S.M. 5935, 9950.
Smith, W.G. 6536.
Smith, T.L. 4404.
Smith, T.K. 543.
Smith, T.L. 5360.
Smith, T.W. 4798.
Smith, V.A. 4596.
Smith, W.D. 6229, 8655.
Smith, W.D. 6229.
Snow, G.A. 9516.
So, S.Y. 7985.
Soares, L.A. 717.
Soave, J. 2274.
Sobczak, E. 5609.
Sobek, H.M. 4.
Sobel, R.S. 810.
Sobolev, V.R. 7052.
Soboleva, G.L. 5421.
Sobotka, M. 9987.
Sobsey, M.D. 8106.
Sobsey, M.D. 8106.
Soda, K. 1872, 1890, 6308, 9127.
Soederstroem, B. 515, 6898.
Soedigdo, P. 2079.
Soegaard, H. 8970.
Soegaard, P. 229, 7028.
Soeters, W. 5155.
Solos, J.N. 4873, 7172.
Sogka, R.E. 6993.
Sokal, S.V. 1612.
Sokhs, S.S. 5688.
Sokol, M.S. 1574.
Sokolov, A.P. 6454.
Sokolov, I.G. 7871.
Sokolov, L.B. 1682.
Sokolova, E.I. 297.
Sokolova, K.Ya. 7236.
Sokurova, E.N. 6026.
Sok, C. 9150.
Solomon, R.J. 1773.
Solonke, R.B. 2290.
Solanki, L.S. 3137.
Solberg, C.O. 6113.
Solberg, O. 738.
Solc, C. 1347.
Solci, Z. 5969, 8638.
Solier, J. 1905.
Soliman, A.H. 2881.
Solis-Gaffar, M.C. 6041.
Solinka, M.R. 655, 2407.
Soli, R.D. 1528.
Solidarity, J. 714.
Solis, P.V. 3164, 9566.
Solobug, V.V. 2523.
Solomatin, D.A. 449.
Solomon, E.I. 8280.
Solomon, H.M. 309, 2031.
Solomon, J.J. 8567.
Solomon, R.J. 6460.
Solozano, R.F. 5734.
Solovicia, T.F. 1973.
Solovskiy, M.P. 7913.
Solyom, F. 3458.
Somasegaran, P. 1786.
Somayaji, R. 3774.
Somayya, V.V. 8507.
Somers, P.J. 1936, 4844.
Somerscales, E.F.C. 5444.
Somerson, L.M. 8142.
Somerville, P.C. 7255.
Somerville, T.H. 9422.
Sommer, H.F. 1327, 3104, 5028, 87.
Somers, H.M. 737, 2536.
Son, H.-J. 2766, 2802.
Soncini, G. 3824.
Sone, M. 715.
Song, Y. 6152.
Song, F.-J. 623.
Soni, J.L. 3283.
Sonnenberg, A.S.M. 1955.
Sonnettnet, B. 1794, 2691, 9931.

- Sonntag, H.-G. 307, 1108.
 Sonobe, J. 255.
 Sonoda, R.M. 1413, 5835.
 Sonomoto, K. 981, 3726, 4541.
 4725, 5501, 5645.
 Sonoyama, T. 928.
 Sora, R.G. 8378.
 Sood, R.S. 1643, 7990.
 Soper, K. 4860.
 Sosparkar, P.M. 8985.
 Sotgiu, R.S. 995, 10333.
 Sor, F. 1526.
 Sorabji, D. 6399.
 Soracco, R.J. 3332, 5221.
 Sorensen, E.L. 7750.
 Sorensen, J. 8966.
 Sorensen, D.K. 829.
 Soriano Garcia, F. 4284.
 Soriano, F. 2447, 2524, 2541, 7999.
 Sorn, M. 4986.
 Sornchai, C. 9305.
 Sorkin, D.Y. 581.
 Sorrell, T.C. 3383.
 Sorrell, T. 1082.
 Sorrelli, T.C. 4292.
 Sorrentino, J.W. 7118.
 Soru, E. 6483.
 Sosa, A. 685.
 Soto, P.E. 461.
 Sotomayor, I.A. 5716.
 Sotomayor, J. 6729.
 Souti, G. 161.
 Souli, E. 2458.
 Sourti, T. 4715.
 Souser, M.L. 5266.
 Souter, R.D. 2280, 2281.
 Soutter, A. 7620.
 Southall, P.J. 8734.
 Southard, S.G. 9409.
 Southern, P.M., Jr. 3314.
 Souty, M. 4129.
 Souza, L.C. 8975.
 Sovacool, G.W. 1965.
 Spagnoli, G., Jr. 1275, 1335.
 Spagnoli, R. 6157, 6167, 6168.
 Spain, J.C. 3788.
 Spalding, D.H. 1532.
 Spalholz, B. 7231.
 Spalling, P.G. 1474, 1497.
 2923, 6939, 8666.
 Spallinger, P.F. 9637.
 Spassov, G. 5529.
 Speake, J.D. 8078.
 Speakman, J.B. 2721, 5846.
 Spear, R.R. 1952.
 Spear, S.R. 1663, 6216.
 Special, A.M. 4340, 8810, 9721.
 Speck, W.T. 723, 8817.
 Speckman, R.A. 1040.
 Spectro, S.A. 3347.
 Spedding, P.L. 9983, 9984.
 Speidel, H.K. 8304.
 Speier, J.J. 3373.
 Speiser, J. 1331.
 Speir, T.W. 2337, 3182.
 Speller, D.C.E. 8734.
 Spellman, M.W. 8615.
 Spence, J.T. 8090.
 Spencer-Martins, I. 1853.
 Spencer, D.M. 9247.
 Spencer, J.F.T. 9247.
 Spencer, R.C. 1795, 9671.
 Spencer, W.N. 7087, 8741.
 Spengler, G. 319.
 Spensarkaya, O.N. 655, 2407.
 Spier, L. 7639.
 Spieron, J.J. 2712.
 Speth, S.V. 6115.
 Spethandler, J. 6037.
 Spicer, W.J. 6315.
 Spicher, G. 5620, 5637, 8801.
 Spigelman, G.B. 1940.
 Spiers, J.M. 1258.
 Spikman, G. 3100.
 Spillance, P.A. 1321.
 Spillmann, H. 4840.
 Spira, W.M. 8517, 9314.
 Spiridonova, I.A. 1657.
 Spitz, R. 232.
 Spitz, A. 3972.
 Spitz, L. 1758.
 Spitz, M. 1758.
 Spitz, K.H. 7152.
 Spivack, J.G. 2486.
 Spivak, N.Y. 7922.
 Spitzoesser, D.F. 2026.
 6688, 8473.
 Spitzoesser, W.E. 1471.
 Spivack, S.K. 6681.
 Spohr, M. 3576.
 Spohn, R.A. 1211, 1323.
 Sporr, B.G. 6397.
 Sporer, D. 5993, 7535.
 Sprent, J.I. 600, 3231.
 Spriet, J.A. 5362.
 Spring, H. 307.
 Spring, O. 7953.
 Springgale, C.F. 6409.
 Sprnno, P.J. 3449.
 Sproat, B.S. 4596, 4597.
 Sprocati, M.T. 1374.
 Sprott, G.D. 3330.
 Spudich, J.N. 4561.
 Spudich, E.L. 4561.
 Spycher, G. 9566.
 Sredosova, M. 304.
 Srekanthan, K.R. 4622.
 Sreekumar, V. 3149.
 Sreenath, H.K. 6550.
 Sreeramulu, K.R. 4227.
 Srevalsan, T. 3370, 9690.
 Sridhar, R. 384, 1157, 6750.
 Srenc, F. 3622.
 Srikar, S. 6590.
 Srinivasa Rao, G. 493.
 Srinivasan 1098.
 Srinivasan, M.C. 2814, 3677.
 4740, 7564, 8211, 8304.
 Srinivasan, N. 8545.
 Srinivasan, V.R. 4205.
 Srimma Rao, T. 493.
 Sringaranathan, N. 4910.
 Srivastava, A.K. 3771, 5855.
 Srivastava, A.S. 5468, 5484.
 Srivastava, G.P. 79.
 Srivastava, K.C. 5806.
 Srivastava, A. 5712.
 Srivastava, O.P. 3121, 7933, 7939.
 Srivastava, P.C. 8797.
 Srivastava, R.C. 3976, 6782, 9439.
 Srivastava, R.N. 4048.
 Srivastava, R.S. 8534, 8539.
 Srivastava, S.K. 4005.
 Srivastava, S.L. 3992.
 Srivastava, O.C. 7114.
 Srivastava, V.J. 5311.
 St. John, T.V. 1485, 8671, 9539.
 St. John, W.D. 5420.
 St. Pierre, S. 6722, 2401.
 St. Plennetz, H. 4412.
 Staaf, H. 528, 2300.
 Stachow, C.S. 6439.
 Stack, R.J. 8431, 9259.
 Stack, R.W. 3184.
 Stack, S. 1371.
 Stackhouse, J. 4875.
 Stadler, D. 3819.
 Stadler, P. 8751.
 Stadtman, T.C. 88.
 Stafford, A.E. 1502.
 Stager, C.E. 9501, 9954.
 Stagno, S. 1079.
 Stahl, M.L. 4508.
 Stahl, S. 8288.
 Stahl, U. 3749, 7263.
 Stahr, M. 6705.
 Staib, F. 4538.
 Stainken, D.J. 9012.
 Stalker, K.M. 9816, 8034.
 Staley, T.E. 5950.
 Stalker, D. 5149.
 Stalker, M.T. 7727.
 Stall, R.E. 456, 1309, 2224.
 5025, 5741, 6876.
 Stallings, W.C. 6537.
 Stalpers, J.A. 3014.
 Stamm, J.W. 812.
 Stamm, W.E. 9923, 9951.
 Stananus, T. 3543.
 Staniszek, R.S. 1684.
 Standart, J.Y. 420.
 Standard, P. 8165.
 Standard, P.G. 4543.
 Standiford, H.C. 6148.
 Stanek, J. 6706.
 Stanek, J.L. 9916.
 Stanek, G. 6048.
 Stanek, M. 7710.
 Stanford, J.B. 4389.
 Stanghellini, M.E. 426, 5006.
 Stanislas, J. 9830.
 Stanislas, E.S. 3456.
 Stankevich, E. 6056.
 Stankevich, Z. 8141.
 Stanokova, M. 2663.
 Stanokova, M. 3597.
 Stanley, J. 9370.
 Stannard, C.J. 4479.
 Stannbury, J.B. 228.
 Stantic-Pavlinec, J. 7208.
 Stanton, D.T. 5204.
 Stark, A.-A. 1095.
 Stark, D. 5876.
 Stark, J.R. 1910, 6538.
 Stark, P.M. 6601.
 Starkey, D. 1460.
 Starkey, T.E. 1215.
 Starmer, W.T. 2295.
 Starnes, R.W. 8206.
 Starr, A.J. 712.
 Starratt, A.N. 2990.
 Startin, R.J. 6687.
 Stas, G. 2595.
 Stasio, A. de 6014.
 Stastna, J. 1832.
 Stastna, J. 4351, 7146.
 Statham, J.A. 8495.
 Statler, G.D. 1338, 7730.
 Staub, Th. 4544.
 Stauffer, L.R. 9900.
 Staunton, J. 6533, 6563, 7016.
 Stavely, J.R. 5685, 9498.
 Stavrc, S. 222.
 Slavsky, A.V. 7024.
 Steadham, J. 2517.
 Stearns, J.R. 4940.
 Steckel, J. 6543.
 Steedman, D.J. 486.
 Steele da Cruz, F. 6344.
 Steele, J.C.H. 6039.
 Steele, J.H. 364, 3287.
 Steele, J.L. 5880.
 Steele, K.W. 613.
 Steele, P. 7770.
 Steen, H.B. 6339.
 Steen, W.C. 2882.
 Steennis, P.J. 8275.
 Steer, A.G. 8938.
 Steere, L.L. 4514.
 Stefancich, G. 7082.
 Stefani, A.M. 3927.
 Steffens, A. 1607.
 Steffens, G. 2573.
 Steger, G. 8529.
 Steglich, W. 6083, 8042.
 Steigbigel, R.T. 7978.
 Stein, M. 887, 890.
 Stein, M.D. 8092.
 Steinberg, J. 6964.
 Steinbuechel, A. 4591, 6488.
 Steindler, K.A. 5379.
 Steiner, M. 6283.
 Steinfield, A.S. 7170.
 Steingrube, V. 2401.
 Steinmetz, H. 4412.
 Steinmetz, M. 4429.
 Steinmueller, W. 6243.
 Steltz, H.-O. 7362.
 Steltz, T.A. 6535.
 Stejskal, E. 9137.
 Stejskal, G. 3134.
 Stemmer, W.P. 387.
 Stemmer, W.P. 1226.
 Stender, J.O. 1550.
 Stenderup, A. 8154.
 Stengel, M. 8375.
 Stenroos, R. 2210, 5216.
 Stenroos, A.S. 9716.
 Stensel, H.D. 5329.
 Stenson-Holst, L. 2669.
 Stenstrom, I.-M. 8498.
 Stenstrom, E. 8171.
 Stenstrom, D.J. 4898, 6669.
 Stepan, K. 4663, 5491.
 Stepanian, K.R. 7333.
 Stepanov, S.I. 9626.
 Stepanov, V.M. 20, 4911, 6490.
 7393, 8276, 8281.
 Stepanova, E.S. 1676.
 Stepanova, N.T. 1444.
 Stepanova, O.S. 7957.
 Stepanova, T.V. 661.
 Stephens, C.T. 1265, 2194.
 2233, 2234, 2268, 3898.
 Stephens, D.J. 2694.
 Stephenson, J.D. 776.
 Stepanov, V.P. 6160.
 Sterkin, V.E. 7393, 7867.
 Stern, H. 5375.
 Stern, N.J. 174, 236, 241, 1071.
 Sterne, E. 2913.
 Sterner, R.M. 792, 2670, 3940.
 Stettler-Spichiger, U. 1624.
 Stettler, R.F. 9512.
 Stetsch, B. 3477.
 Stetud, P.A. 6902.
 Stetud, W. 798, 2636.
 Stevens, C. 368, 1185, 3007, 5954.
 Stevens, D.A. 9986.
 Stevens, L. 2812, 6525.
 Stevens, P. 4708, 7469, 8366.
 Stevens, T.H. 2803.
 Stevens, W.A. 8179.
 Stevenson, A.B. 9484.
 Stevenson, C.A. 9802.
 Stevenson, W.R. 9494.
 Stewart, A.V. 4954.
 Stewart, C.S. 3511, 8035.
 Stewart, C.V. 8793.
 Stewart, D.J. 6466.
 Stewart, G.A. 1728.
 Stewart, G.G. 3681, 5432.
 Stewart, J.C. 3511.
 Stewart, J.D. 2026.
 Stewart, J.W.B. 567, 6996.
 Stueber, K. 4.
 Stewart, T.B. 1910.
 Steyn, P.L. 2028.
 Steyn, P.S. 6692, 6695, 6696.
 6698, 6700, 6702, 8506.
 Stichel, E. 4264, 4266.
 Sticht-Groh, V. 192.
 Stickler, D.J. 6040.
 Stieb, M. 6645.
 Stiffler-Rosenberg, G. 3892.
 Stiffler, D.M. 185, 4803.
 Stiles, M.E. 816.
 Stille, W. 2556.
 Stiller, J.M. 9914.
 Stirmart, D.P. 7729.
 Stinson, E.E. 5650.
 Stipanovich, R.D. 1648, 5831.
 Stirling, J.L. 3673.
 Stobbering, E.E. 6147.
 Stober, M. 1708, 1716.
 Stockdale, P.H.G. 5218.
 Stocker, B.A.D. 669.
 Stockinger, K.R. 7833.
 Stockman, L. 9992.
 Stockel, H. 852, 6331.
 Stoelmer, K. 6035.
 Stoelmer, F.C. 4894.
 Stoessl, A. 5051.
 Stoessl, P. 5522.
 Stokes, B.O. 8486.
 Stoldt, D. 6872.
 Stone, L.D. 8923.
 Stone, J.R., Jr. 5242.
 Stone, L.L. 9899.
 Stone, M.S. 9657.
 Stones, P.B. 5282.
 Stones, T. 532.
 Stoner, J. 6196.
 Stoney, G.K. 9025.
 Storch, R.H. 3084.
 Storey, C.L. 443, 2236.
 Storey, D.E. 8758.
 Stotland, P. 233, 1077.
 Stott, D.E. 5599.
 Stotmeister, U. 7309.
 Stotzky, G. 1565, 9509.
 Stouffer, R. 1209.
 Stouffer, R.F. 2142, 8595.
 Stough, M.C. 1130.
 Stouffer, C. 4592.
 Stouthamer, A.H. 3568, 5117.
 Stover, E.L. 2609, 5137, 5293.
 Stradoni, R. 4341.
 Strandberg, D.A. 7983.
 Strandberg, G.W. 6635.
 Strange, K. 5208.
 Strasser de Saad, A.M. 9161.
 Strating, M. 4644.
 Straub, O.C. 4710.
 Straube, G. 2898.
 Strauch, D. 1732, 8936.
 Strauch, C. 7372.
 Strayer, R.F. 3471.
 Streeter, C.L. 254.
 Streeter, J.G. 8626.
 Strehaioun, P. 2870, 4729.
 Streicher, W. 3416, 6158, 9717.
 Streikven, I.K. 28.
 Strenzel, I. 7075.
 Stretch, A.W. 4052, 6831.
 Stribley, D.P. 1471, 2329, 5101.
 Strickland, K.L. 8834.
 Strickland, T.C. 5102, 6904.
 Strider, D.L. 1298, 2229, 5012.
 Striessnig, A. 976.
 Stringer, C.D. 6424.
 Stringer, M.F. 5235, 6711.
 Stringer, S.J. 7626.
 Stringer, S.G. 808.
 Strittmatter, W. 8332.
 Strizhevskaya, A.V. 7418.
 Strizhkov, A.M. 9760.
 Strobel, G.A. 2967, 3959, 8504.
 8508.
 Strockhove, L.S. 1770, 9869.
 Strockbach, G. 3701.
 Strohm, B.C. 1709.
 Strom, P.F. 7191.
 Stroman, D.W. 9764.
 Stromberg, E.L. 1199.
 Strong, M.E. 583.
 Strong, A.Y. 7393.
 Stros, F. 1087, 4731, 7519, 9120.
 Strohane, R.N. 1622.
 Strohshne, R. 9451.
 Stroutkamp, K.G. 9178.
 Stroup, W.H. 2059, 2912.
 Struili, D.G. 6973, 6974.
 Struwe, S. 5889.
 Strzelczyk, E. 4174, 5881.
 Stuart, L. 5885.
 Stuart, M.R. 6914.
 Stubbins, J.M. 3624.
 Stuckey, R.E. 6734.
 Studnickova, M. 6496.
 Stueber, K. 4.
 Stuetgen, E. 1859.
 Stuetz, P. 6158.
 Stuly, A.A. 9255.
 Stupperich, E. 7414.
 Sturani, E. 4562.
 Sturk, A. 8525.
 Stuteville, D.J. 353.
 Stuthman, D.D. 3125.
 Stutz, P. 3416.
 Stutzenberger, F. 974, 9179.
 Styler, D.J. 1303, 2231, 5003.
 Styliulis, I. 8020, 9163.
 Syulo, B. 2077.
 Su, D.M. 4475.
 Su, H.J. 8596.
 Su, T.-L. 5213, 7096.
 Suami, T. 7282.
 Suarez, J.A. 7584, 7585.
 Suarez, M.C. 4317.
 Suassuna, I. 7128.
 Subba Rao, K.V. 6777, 9455.
 Subba Rao, N.S. 1500, 8174, 9595.
 Subba Rao, P.V. 4083, 5683.
 Subba Rao, R.V. 2008, 2012.
 Subbaroop, K. 8045.
 Subrahmanyam, P. 4082, 4083.
 5679, 5683, 9475.
 Subramanian, E. 1904.
 Subramanian, R. 1574.
 Subramanian, S. 1777, 3695.
 Subramanya, R. 4093.
 Subramoniam, V. 7680.
 Suchardova, O. 3258.
 Suchareva, S.I. 1163.
 Suchkov, Yu.G. 1680.
 Suchkov, Yu.G. 2642.
 Sud, L.J. 3301.
 Suda, I. 4290, 4291.
 Suda, M. 4291.
 Suda, Y. 6204.
 Sui, J. 201.
 Sue, J.M. 85, 87.
 Sued, J. 2823.
 Suckane, M. 2798.
 Suel, S. 2838.
 Suess, E. 8188.
 Suffert, I.H. 8956.
 Sufita, J.M. 4749, 6648.
 Suga, K. 4447, 5286.
 Suga, T. 1661.
 Sugahara, T. 914, 7410, 8239.
 Sugai, I. 1918.
 Sugai, T. 3755.
 Sugai, A.M. 9986.
 Sugawara, K. 3904.
 Sugawara, K. 8888, 8889.
 Sugawara, M. 7179.
 Sugawara, S. 5241, 9793.
 Sugawara, Y. 4649.
 Sugden, J.K. 4325, 4389.
 Sugita, M. 2827, 2828, 2829, 4424.
 Sugura, M. 4504.
 Sugura, T. 6463.
 Sugiyama, A. 5144, 6522, 9643.
 Sugiyama, T. 6620.
 Suhadolnik, R.J. 7746.
 Suhara, Y. 2743, 9248.
 Suhbarban, M. 3094, 3096.
 Suhren, G. 201, 1073.
 Sudan, M.T. 8952.
 Suikho, M.-L. 4728.
 Sukhodol, V.F. 8413.
 Sukumaran, I.C.P. 2557.
 Sule, C. 9010.
 Sule, C.Z. 3313.
 Suleimanova, O.G. 9988.
 Sullivan, C. 4078.
 Sullivan, J.D., Jr. 2956.
 Sullivan, K. 9033.
 Sullivan, P.A. 58.
 Sullivan, R. 2908.
 Sullivan, T.D. 9934.
 Sulova, J. 9010.
 Sultani, N.E. 7578.
 Sum, S. 3995.
 Sum, S. 7359.
 Sumbai, G. 1624.
 Sumbu, Z.L. 2070.
 Sumi, S.-I. 1970.
 Sumida, M. 6523.
 Summanwar, A.S. 1124, 2109, 3042.
 Sumerton, J. 9875.
 Summons, R.E. 1509.
 Sumner, D.R. 5706, 6772, 9473.
 Sumner, D.R., Jr. 367.
 Sumner, J.L. 3858.
 Sumner, P.E. 2690.

Author Index

- Sumnevich, V.G. 7527.
 Sumper, M. 8223.
 Sun, P.T. 9804.
 Sun, S.K. 3093.
 Sunagawa, M. 4421.
 Sunamoto, J. 4632.
 Sundara, N. 4461.
 Sundaram, S. 3281, 8730.
 Sundaraj, T. 1777.
 Sundarim, L. 2275.
 Sundman, V. 4244, 9597.
 Sundquist, B. 7184.
 Sundqvist, V.-A. 1751, 6075, 7229.
 Sundstrom, D.W. 9104.
 Sundstrom, F.J. 5108.
 Sung, J.-M. 1499.
 Sung, S.-C. 2089.
 Sunuolainen, H. 2044, 2860, 3806.
 Suorhi, T. 8407.
 Suprun, S.M. 1841.
 Surico, G. 2966.
 Surrey, M.R. 1738.
 Surya, I. 5794.
 Surva, I.N. 1580.
 Suslow, T.V. 403.
 Sustr, J. 6637.
 Susuri, L. 1136.
 Sutar, I. 1304.
 Sutherland, I.W. 1951, 2746.
 Sutherland, J.B. 3261.
 Sutherland, J.R. 3174.
 Suthers, H.L.B. 7294.
 Suto, T. 7300.
 Sutphen, N.T. 2505.
 Surtina, S.J. 7283.
 Szwed, W. 725, 3376, 3420, 8836, 9743.
 Sutton, D.C. 4068, 9334.
 Sutton, J.C. 7770, 9484.
 Sutton, T.B. 5739, 8570.
 Sutton, W.D. 7860.
 Suyama, Y. 1834.
 Suyumova, A.S. 1600.
 Suzuki, A. 203, 915, 9720, 9774.
 Suzuki, C. 1950.
 Suzuki, H. 152, 5430, 6511, 7176, 7303, 7304, 7305, 7373.
 Suzuki, K. 325, 3654, 6418, 6423, 6539, 6561, 8242, 8257.
 Suzuki, K.-I. 9768.
 Suzuki, M. 733, 950, 1970, 6204, 6539, 8047, 8389, 9777, 9794.
 Suzuki, N. 3723.
 Suzuki, S. 1804, 1976, 3584, 5430, 9055.
 Suzuki, T. 914, 7558, 9117.
 Suzuki, Y. 5509, 8523, 8876.
 Svaneberg, M. 3500.
 Svandova, E. 4507.
 Svarva, P.L. 2425.
 Svedhem, A. 2055.
 Svendsen, I. 27, 29.
 Svendsen, J.A. 3873.
 Svendsen, A.-M. 9304, 9310.
 Svensson, S.B. 880, 5383, 5402.
 Svensson, B. 29.
 Svensson, C. 1959.
 Svidersky, V.A. 2384.
 Svindland, H.B. 2425.
 Svirbel, J.R. 9943.
 Svitkova, I.D. 7330, 8324.
 Svitkin, Yu.V. 9684.
 Svoboda, I.F. 2888.
 Svyadishch, I.F. 1867.
 Svyatol, V.I. 3388.
 Swai, V. 3407.
 Swain, A.J. 9273.
 Swaisgood, H.E. 61, 63.
 Swait, A.A.J. 487, 1201, 1398.
 Swaminathan, B. 672.
 Swaminathan, M.S. 1348.
 Swenepoel, E. 2028.
 Swango, L.J. 3611.
 Swango, P.A. 3501.
 Swank, W.T. 5102.
 Swart, H.J. 3631.
 Swartz, M.D. 3594.
 Swartz, M.N. 3594.
 Swazey, L.D. 5239, 7135.
 Swazey, J.K. 4033.
 Sweeney, A.W. 1013, 1807, 6591, 6622, 7483.
 Sweeney, M.H. 3273.
 Sweet, R.L. 2432.
 Swets, L.E. 1410.
 Swelam, M.A. 1813.
 Sweney, R.R. 866.
 Swenson, J.M. 3381, 9657.
 Swardlow, R.D. 1878.
 Swartz, M. 514, 8187.
 Swinburne, T.R. 5733.
 Swinburne, T.R. 3000, 3019, 3999, 4070.
 Swings, J. 362, 419.
 Switzenbaum, M.S. 5295, 8957.
 Switzer, G.L. 6908.
 Switzer, R.L. 7382.
 Swid, G. 699.
 Sykes, D.E. 8252.
 Sykes, R.B. 1609, 7167, 7175.
 Sytleman, S. 7778.
 Sytler, J. 2182.
 Sylvestre-Bradley, R. 2333.
 Sylvestre, E.S. 342.
 Sylvestre, M. 2895, 6047, 6050, 7162.
 Sylvia, D.M. 3173, 4144, 5200.
 Symons, R.H. 3028.
 Synge, C. 1554.
 Syracuse, M.J. 3596.
 Syrett, K.R. 6320.
 Sytnik, I.A. 1618, 2406.
 Sytnik, N.G. 1085.
 Syverson, C. 4894.
 Syverson, J.P. 4135.
 Syzdek, L.D. 4495.
 Szabo, I.M. 3192, 9798.
 Szabo, L. 6704, 7632.
 Szabo, L.A. 9003.
 Szabo, M. 7735.
 Szabolcs, M. 78.
 Szalay-Marzso, L. 3718.
 Szalay, A.A. 785.
 Szanislo, P.J. 9558.
 Szatmari-Goodman, G. 6843.
 Szczodrak, J. 5510.
 Szewiolek, K. 2063.
 Szerszen, J. 1133.
 Szwed, A. 1893, 2659.
 Szczolnik, M. 5004.
 Szkudlarek, L. 820.
 Sztajn, J. 4795.
 Szumilo, T. 5498.
 Szwejcar, E. 1845.
 Szwerniski, H. 8933.
 Tabagachi, S. 883, 1803, 7089.
 Tabata, M. 673.
 Taber, W.A. 8337.
 Tabo, Z. 1086.
 Taber, P.S. 818.
 Tabuchi, A. 1918.
 Tabuchi, T. 5996.
 Tacconi, G. 4333.
 Tachibana, H. 1316, 4932, 5040.
 Tachibana, M. 1896.
 Tachiki, T. 5526, 6519.
 Tadanier, J. 6198, 6199.
 Taga, S. 292, 9881.
 Taga, T. 256.
 Tagawa, M. 2700.
 Tagawa, Y. 6491.
 Tagawa, K. 8274.
 Tagg, J.R. 4427.
 Tagger, A. 1723.
 Taguchi, H. 1825, 4338, 4522.
 Taguchi, H. 5625, 6478, 8402, 9263.
 Taguchi, R. 8235, 8242.
 Taguchi, T. 8242.
 Taha, R.A. 2922.
 Tahara, S. 7095.
 Tahara, Y. 1981, 5552, 7417.
 Tahoun, M.K. 102.
 Tai, M. 735.
 Taig, M.M. 780, 1647, 1656, 1670, 1678, 6236.
 Taillair, S. 3591.
 Tailleux, R. 3589.
 Taitier, F.H. 1456.
 Taitmuer, D. 3591.
 Taiwo, M.A. 4098.
 Tajara, R.D. 6088.
 Tajima, K. 9171.
 Tajima, M. 5518.
 Tajiri, T. 8303.
 Takada, K. 3118.
 Takagahara, I. 6489.
 Takagi, A. 2863, 8130, 8133.
 Takagi, S. 7079.
 Takahara, Y. 4720.
 Takahara, Y. 1672.
 Takahashi, F. 3350.
 Takahashi, H. 125, 1980, 2570, 2571, 2589, 6371, 9926.
 Takahashi, I. 718, 1916.
 Takahashi, K. 945, 2830, 4084, 8344, 8345, 8346, 8779, 9423.
 Takahashi, M. 7702, 7897.
 Takahashi, S. 1, 2778, 6192, 7490, 8903.
 Takahashi, T. 276, 313, 1909, 3039, 6797, 7315, 7410, 8239, 9171.
 Takahashi, W. 3410, 3432, 6190.
 Takagi, M. 514, 8187.
 Takai, S. 4152.
 Takaiishi, T. 3427.
 Takakuwa, M. 6385, 6528.
 Takamatsu, T. 3818, 5359.
 Takamaya, T. 2731.
 Takamaya, K.-I. 4555.
 Takamaya, S. 6306.
 Takamizawa, K. 4441.
 Takamori, Y. 5996.
 Takano, M. 9033.
 Takano, S. 6219.
 Takao, S. 3650.
 Takao, T. 4915.
 Takasaki, Y. 80.
 Takase, I. 3155, 5877.
 Takase, K. 5590.
 Takase, Y. 5190.
 Takashio, M. 3686.
 Takasugi, H. 4376, 5191, 8842.
 Takasuka, M. 3460, 4361.
 Takata, I. 6472, 7343, 7344.
 Takatsuku, A. 1564.
 Takaya, T. 4376, 6191, 8842.
 Takayama, C. 4300.
 Takayama, M. 3365.
 Takayama, S. 203, 9774.
 Takayama, T. 2732.
 Takeda, H. 9868.
 Takeda, K. 6313, 8330.
 Takeda, T. 4915.
 Takeda, Y. 292, 2951, 4915, 6714, 8516, 9305, 9881.
 Takehisa, M. 6512, 7250, 7605, 8492, 8787.
 Takemoto, C.D. 7041.
 Takeno, H. 919.
 Takeoka, A. 2742.
 Takeuchi, I. 9149, 9173.
 Takeuchi, I. 1963, 6452.
 Takeuchi, M. 6192, 8902, 8903.
 Takeuchi, S. 1937, 6849.
 Takeuchi, T. 2823, 3717, 3737, 4423, 5538, 6539, 6218, 6219, 6220, 7452, 9318, 9203, 9778.
 Takeuchi, T.T. 7449.
 Takeuchi, Y. 8839.
 Taki, H. 3385.
 Takiguchi, Y. 4335, 4408, 4418, 8900, 8901, 9377.
 Takimoto, M. 8884.
 Takami, K. 122, 981.
 Takita, T. 1651, 4399.
 Takitani, S. 287.
 Takizuchi, I. 3667.
 Takizawa, M. 3660.
 Takizawa, T. 4494.
 Takumi, K. 2742.
 Talentire, A. 5226.
 Talley, F.P. 685, 5262, 6013.
 Talpaz, H. 9378.
 Tam, M. 9923.
 Tam, S. 1644, 1661.
 Tamai, Y. 8385.
 Tamaki, M. 8884.
 Tamaki, N. 4648.
 Tamaki, S.J. 9866.
 Tamamura, T. 3422.
 Tamaki, H. 8766.
 Tamaki, T. 1671, 2572, 7178, 8905.
 Tamayo, M. P.J. 8542.
 Tamazawa, K. 4359.
 Tamn, C.O. 512.
 Tamminga, S.K. 1083.
 Tamplin, M.L. 8968.
 Tamura, G. 1564.
 Tamura, M. 302, 1939.
 Tamura, S. 5995.
 Tan, K.H. 7610.
 Tan, N. 3248.
 Tan, R.-S. 1741.
 Tan, S.-T. 202.
 Tan, S.T. 9048.
 Tan, T.K. 8977.
 Tanabe, N. 2091, 6719.
 Tanaka, S. 1666, 9795.
 Tanaka, S. 961, 1582, 3726.
 Tanaka, S. 4725, 5501, 6484, 6565, 9775.
 Tanaka, H. 152, 918, 1561.
 Tanaka, T. 1674, 2776, 3432, 3434, 3446, 6190, 6845, 7451, 8057, 8918, 9127.
 Tanaka, J. 3654.
 Tanaka, J. 1971, 8456, 9768.
 Tanaka, M. 7448.
 Tanaka, N. 308, 964, 2074.
 Tanaka, S. 59, 1942, 1943, 8382.
 Tanaka, T. 4616, 5995, 7044, 9793.
 Tanaka, Y. 150, 1646, 8279, 6569, 8820, 8919, 9770, 9772.
 Tandon, A. 3181.
 Taneja, M. 490.
 Taneja, S. 3964, 7726.
 Tannenbaum, S.W. 1553.
 Tang, J. 41, 190, 1883.
 Tang, Q.-Q. 5372.
 Tangnu, S.K. 1047.
 Tani, H. 928.
 Tani, J. 2427, 2435.
 Tani, K. 118, 1937, 3426, 3427, 3428, 6194, 6213.
 Tani, T. 1353, 3912, 3952.
 Tani, Y. 77, 107, 1031, 1861, 1895, 1896, 1982, 3652, 3660, 3731, 4557, 4581, 8204, 8381, 9214.
 Tania, M. 3650.
 Tania, S. 775, 4299.
 Taniguchi, H. 3423, 6520.
 Taniguchi, M. 5995, 8791.
 Taniguchi, T. 511, 2491.
 Tanimoto, M. 928.
 Tanimoto, T. 6139.
 Tanizawa, K. 9308.
 Tanji, S. 2567.
 Tanner, F. 6085.
 Tanner, R.D. 17, 7261.
 Tanoh, A. 6059.
 Tansley, C. 4596, 4597.
 Tansuwan, E.V. 7846.
 Tantsyurenko, E.N. 2377.
 Tanwani, S.K. 2396.
 Tanzer, J.M. 8771.
 Taplin, D. 6276.
 Tarabeh, A.M. 3995.
 Tarakanova, V.S. 7418.
 Tarant, N. 2996, 7654.
 Tarasova, V.E. 6110.
 Tarbuc, R. 3430.
 Tarkka, E. 8660.
 Tarocco, C. 4859.
 Tarodo de La Fuente, B. 4782.
 Tarpy, M.M. 727.
 Tarr, H.S. 488.
 Tasaka, H. 8260.
 Tasaki, M. 4104.
 Tashere, A.V. 787.
 Tashere, F. 8520.
 Tashpash, Zh. 249.
 Tassew, A. 2525, 5153.
 Tate, K.G. 4073, 4121.
 Tate, K.R. 562, 568, 1469, 2381, 3182, 4220.
 Tate, R.L. III. 5912, 5925.
 Tattar, B. 6146.
 Tatini, S.
 Tatrai, J. 7745, 8604.
 Tatsumi, C. 3732.
 Tatsumi, K. 7316, 9180.
 Tatsuno, T. 7589.
 Tattar, T.A. 2311.
 Tauk, S.M. 5628.
 Tauro, P. 5168, 5965, 7331, 7908.
 Tautorus, S.T. 3052.
 Tavantzis, S.M. 3537, 7693, 9409.
 Tavobolov, I.M. 1857, 6462.
 Tavris, A.E. 9800.
 Tavss, E. 6041.
 Tawara, K. 2579.
 Tawartani, T. 1587.
 Tawfik, N.I. 2930.
 Tawil, M. 694.
 Tax, J. 8016, 8034.
 Tayal, M.S. 4778.
 Tayal, M.S. 4778.
 Tayfourt, A. 7821.
 Taylor-Papadimitriou, J. 7109.
 Taylor-Robinson, D. 2397, 3605, 8671.
 Taylor, A.G. 867, 3588, 9481.
 Taylor, C.E.D. 2514.
 Taylor, C.F. 4906.
 Taylor, D. 5345.
 Taylor, D.G. 1881.
 Taylor, D.N. 1078, 6260.
 Taylor, D.F. 7513.
 Taylor, E. 8635, 2880.
 Taylor, F.B. 754.
 Taylor, F.R. 5203, 8218.
 Taylor, G.R. 2468.
 Taylor, G.S. 4041, 4995, 9524.
 Taylor, J.A. 851.
 Taylor, J.B. 2289.
 Taylor, J.D. 5815.
 Taylor, J.M. 3341, 5578.
 Taylor, P.C. 2547.
 Taylor, P.W. 4295.
 Taylor, R.E., Jr. 2924.
 Taylor, R.G. 3361.
 Taylor, S.J. 121, 2674.
 Taylor, T. 6039.
 Tazoe, M. 1673.
 Tchatchoua, J. 8612.
 Tchoumlang, A. 8729.
 Teare, E.L. 6182.
 Tede, H.J. 1454.
 Teather, R.M. 1802, 4857.
 Tebbutt, T.H.Y. 1700.
 Tebeest, D.O. 1189, 1285, 2835.
 Tegeler, R. 7328.
 Tegleirostrem, S. 7621.
 Tegmeier, K.J. 288, 2072, 2953.
 Teh, C.-S. 5219.
 Teixeira, L.M. 5429.
 Teixeira, M. 74, 4634.
 Tekauz, A. 1173.
 Tekrony, D.M. 6734.
 Telford, A.P. 2940.
 Teli, J.C. 2526, 3413.
 Teltow, G.J. 3368.
 Temchenroen, P. 3879.
 Temmen, K.H. 7748.
 Tempera, Y.M. 9784.
 Temple, S.R. 5052.
 Templeton, E. 1285.
 Templeton, G.E. 2835, 5546.
 Ten Cate, H. 8525.
 Ten Cate, J.W. 8525.
 Ten, M. 9405.
 Tenckhoff, V. 2189, 3910.
 Tenney, J.H. 2404, 7073, 8740.
 Tenynson, K. 518.
 Tenser, R.B. 9387.
 Tepedino, A.A. 2910.
 Trapper, B.S. 837.
 Ter-Balian, N.H. 7511, 7512.
 Terada, O. 1858, 8300.
 Teraguchi, S. 175.
 Terahara, A. 3435, 7552, 8455, 8872, 8903.
 Terakado, N. 2515, 7038.
 Teramura, Y. 3790.
 Terai, I. 4502.
 Terao, M. 4335, 4408, 4418, 8900, 8901, 9787.
 Teraoka, N. 3584.
 Terashima, H. 9847.
 Teresh, A. 6540.
 Terekhova, L.P. 1487, 2588, 6109, 7992.
 Terentyev, P.B. 7165.
 Terentyeva, T.G. 780, 1647, 1678.
 Terenzi, H.F. 9074.
 Teresh, P. 8923.
 Terjunt, S.J. 6697.
 Teri, J.M. 7673.
 Ternstroem, A. 8498.
 Terpin, G. 5416.
 Terracina, F. 902.
 Terrell, R. 261.
 Terrell, R.N. 261.
 Tertyshny, V.N. 7643.
 Terui, Y. 6139.
 Tesarova, M. 9534.
 Tesche, B. 4563.
 Tesfai, K. 3670.
 Teshiba, S. 1847, 8776.
 Tesonero, J.V. 5343.
 Tesoriero, L.A. 3063.
 Tessier, P. 3591.
 Tessier, S. 3675.
 Tessler, C.F. 8955.
 Tessler, A.E. 9800.
 Teterivnikova-Babaian, D.N. 7646.
 Teuber, L.R. 605, 8860.
 Teuber, M. 982, 2583.
 Tew, T.L. 1176, 5709.
 Tewan, L. 290.
 Tey, C. 229.
 Tewari, S.D. 2219.
 Tewodros, W. 8980.
 Tey, C.C. 5824.
 Thabaut, A. 746, 8761.
 Thabet, F. 5957, 6946.
 Thadepalli, H. 553, 2516, 6149.
 Thakur, R. 9155.
 Thakral, S.K. 5769.
 Thakur, D.P. 473, 4116.
 Thakur, M.K. 3872, 4054, 7725.
 Thakur, M.S. 7491.
 Thakur, R. 6777, 9455.
 Thakur, S. 8635.
 Thaler, M. 5626, 5643, 5644.
 Thaller, C. 960.
 Thammann, T.J. 9.
 Thawley, D.G. 5374.
 Thayer, D.W. 3, 4886.
 Theander, C. 229.
 Theilen, G.H. 6285.
 Theilen, U. 8772.
 Thermen, A.P.N. 6405.
 Thier, R. 5248.
 Thier, R.L. 2754, 6000, 6035, 8731.
 Theobald, P.W. 2371.
 Theodorou, M.K. 1360.
 Theron, J.J. 9889.
 Theron, G.K. 4217.
 Thiede, R. 4800.
 Thiede, J.M. 4749.
 Thiel, K.-D. 3539.
 Thiermann, A.B. 8118.
 Thies, W.G. 545.
 Thiesen, U. 3762.
 Thilly, W.G. 3879.
 Thinn, R.N. 883.
 Thiruvakkarakas, M. 8295.

- Thoenen, L. 3060.
Thormqvist, T. 4454.
Thorn, E. 5344.
Thomas-Baucom, D. 3616.
Thomas, A.C. 9568.
Thomas, B.J. 405.
Thomas, C.A. 9498.
Thomas, C.E. 1358, 3150, 3634, 4089.
Thomas, C.V. 4798.
Thomas, D. 4482.
Thomas, D.A. 6538.
Thomas, F.C. 790.
Thomas, G.W. 1441.
Thomas, J. 3149.
Thomas, L.L.M. 8525.
Thomas, M.Z. 5328.
Thomas, O.S.L. 3032.
Thomas, P.E. 6814.
Thomas, P.L. 3941, 4967.
Thomas, R.C. 1675, 3441.
Thomas, R.J. 9579.
Thomas, T.D. 94, 8463.
Thomas, W.E. 5553.
Thomazeau, R. 4439, 4440.
Thommell, J. 4534.
Thompson, A.C. 4556.
Thompson, A.D. 378.
Thompson, A.H. 475.
Thompson, C.J. 1521, 1523.
Thompson, F.S. 9807.
Thompson, J.L. 1521, 2693, 8095.
Thompson, M. 6706.
Thompson, M.J. 5175.
Thompson, M.R. 2962.
Thompson, R.L. 836, 9947.
Thompson, S.G. 9763, 9785.
Thompson, T.L. 9648.
Thompson, W.J. 437, 1445, 5860, 5861.
Thomson, A.D. 3035.
Thomson, B. 220.
Thomson, J.A. 4716.
Thomson, J.E. 253.
Thomson, R.M. 8954.
Thomson, S.V. 1207.
Thomson, W.J. 7671.
Thonart, P. 2070.
Thongmeekarom, P. 1129, 5672, 6813.
Thoro, A. 9020, 9163, 9928.
Thoresen, T. 9832.
Thormaehlen, B. 9740.
Thorne, H.V. 7110.
Thorne, J.G. 7884.
Thorne, N. 5725.
Thornely, R.N.F. 5935.
Thornley, J.H.M. 8490.
Thornberry, C. 737, 2536.
Thornhill, S.J. 6116, 6117, 6120, 7181, 8041, 9657, 9742, 9745, 9746, 9748.
Thornton, D.H. 5229.
Thornton, L. 4238, 8686.
Thornton, J.B. 9804.
Thornton, J.D. 3172.
Thornton, R.J. 140, 147, 3744.
Thornton, S.A. 9636.
Thorogood, S.A. 4852.
Thorpe, C. 7427.
Thorpe, H.J. 3998.
Thorud, M. 8209.
Thottapilly, G. 332, 7672.
Thouless, M.E. 1743.
Thouvenot, J.C. 2115.
Thouvenot, D. 2066.
Threllfall, E.J. 1540, 4277, 7904.
Thresh, K.D. 4851.
Thresh, J.M. 2978.
Thronson, M.M. 5604.
Thulasi, G. 6684, 7611.
Thuma, B.A. 6815.
Thune, R.L. 2764.
Thunell, R.K. 7580.
Thurman, D. 7594.
Thurman, P.F. 4331.
Thurston, H.D. 1134, 5050, 9325.
Thylstru, A. 8996.
Thyr, B.D. 7750.
Tian, B. 6811.
Tian, Y.-C. 6811.
Tian, Y. 2744.
Tideman, K. 511, 7621.
Tidwell, R.R. 4316.
Tidwell, T.E. 3210, 5871.
Tiedje, J.M. 1968, 2011, 4760, 5110, 6648, 8430, 8941.
Tiemeier, W. 3851.
Tien, P. 2154.
Tien, P. 4475.
Tietz, A.J. 7994, 8843.
Tietze, E. 3302.
Tiford, L.A. 1774.
Tighe-Flova, D.J. 169.
Tijane, M.N. 941.
Tijssen, P. 4473.
Tikhonmaki, E. 6252, 6253.
Tikhonov, V.T. 7744.
Tikhonov, A.N. 3266.
Tiliak, K.V.B.R. 1500, 2226, 7840, 9582.
Tiliak, S.T. 4000.
Tilman, A.M. 6205.
Tilman, G.L. 4281.
Tilton, R.C. 4477, 5449, 7995, 9911.
Timans, U. 2487.
Timchenko, A.A. 7356.
Timchenko, N.O. 9988.
Timewell, R.M. 3331.
Tirman, R.G. 4970.
Timkovich, R. 2777.
Timm, E.M. 4778.
Timmer, L.W. 320, 1204, 8576.
Timmermans, A.M. 60.
Timmermans, P.C.J.M. 5940.
Timmerms, P.R. 8358.
Timms, P. 7538, 8367.
Timochina, E.A. 7157.
Timokhina, E.A. 4911, 7393.
Timoney, P.J. 862, 8634.
Tinanoff, N. 8771.
Ting, I.P. 4209.
Tinker, P.B. 1471, 2329, 5101.
Tinline, R.D. 379.
Tinson, R.W. 6896.
Tiong-Kheng, K. 7681.
Tioyang, P. 4565.
Tippett, J. 6563.
Tippett, T. 9523.
Tirado, M. 75.
Tiron, S. 7950.
Tirannen, L.S. 3943.
Tischer, E. 5373.
Tischhauser, G. 8908.
Tisdale, M. 6070.
Tishchenko, E.I. 7921, 7923.
Tishkov, V.I. 7380.
Tison, D.L. 2624, 7254.
Tison, J.C. 750, 771, 772, 1623.
Titatar, S. 5770.
Titova, G.T. 3943.
Titova, G.T. 3943.
Tiwari, E. 9715.
Tittlebaum, M.E. 1766.
Tivunova, N.A. 1877.
Tiware, R. 7927.
Tiware, V.K. 3181.
Tjager, T.B. 1069, 3837.
Tjebkram, J.B. 2584.
Tjepkema, J.D. 1496, 3243, 7859.
Tkachenko, V.P. 1808.
Tkachuk, L.V. 2444.
Tkachuk, N.I. 1618.
Tkacz, B.M. 5072.
Tkachuk, V. 2590, 9186.
Tskakova-Hogonova, H. 2929.
Toba, T. 3829.
Tobari, J. 3654.
Tobe, H. 2823, 5539.
Tobias, I. 3036, 4032.
Tobin, H. 8838, 8939, 8940.
Tochikura, T. 944, 1915, 5526, 6511, 6513.
Toda, S. 5257.
Toda, Y. 3286.
Todd, A.D. 5725, 9489.
Todor, J.D. 765.
Todd, R. 2307.
Todorovic, M. 2350.
Todsichyuk, S.R. 9231.
Togami, M. 1963, 7246.
Toha, J.C. 7510.
Toghane, M. 1854.
Tohno, M. 7169.
Toivanen, A. 8143.
Toivanen, P. 9654.
Tokairin, Y. 9815.
Tokareva, N.L. 1642, 7165.
Tokeshi, H. 2258.
Tokoro, K. 5526.
Tokoro, K. 2573.
Tokuyama, T. 2014.
Toledo, G. 4336.
Toledo, R. 4849.
Toler, R.W. 3117, 3536, 5704, 6774, 9470.
Tolin, S.A. 4929, 6841, 7222, 9463.
Toll, G.L. 3048.
Tollie, A. 201, 1073, 4818.
Tollerson, T.S. 5915.
Tolman, R.L. 1172, 8050.
Tolman, L.V. 5543.
Tolksdorf-Neutzing, R.M. 7036.
Toma-Braghini, M. 4976.
Tomashvsky, A.I. 2462.
Tomazs, A. 4273.
Tombeti, F. 8964.
Tombs, M.P. 8279.
Tombs, F.G. 6230.
Tomerlin, J.R. 2149, 3105, 3932.
Tomnaga, Y. 7369.
Tomoka, H. 8259, 8265.
Tomita, F. 1671, 2572, 7178, 8344, 8345, 8905.
Tomita, K. 57, 983, 8888.
Tomita, P. 1568.
Tomita, Y. 1369.
Tomiyama, K. 3053.
Tomiyama, Y. 4655.
Tomiyama, N. 8366, 8429.
Tomlinson, J.A. 308, 4020.
Tommasi, L.R. 8971.
Tommerup, I.C. 1734.
Tomoda, H. 8217.
Tomoda, K. 6503.
Tomopkin, R.B. 6669.
Tomopkins, F.D. 9491.
Tomopkins, G.R. 7880.
Tone, H. 9203.
Tone, E. 6066.
Tone, M. 6066.
Tong, C.C. 1851, 5594.
Tong, J.P. 2540.
Tonks, N.V. 9213.
Tonomura, K. 152.
Tonooka, Y. 5561.
Tonosberg, T. 3649.
Tooby, E. 3383.
Tooley, P.W. 1130.
Toome, V. 6193.
Topal, R. 3992.
Topka, P. 5336.
Topor, R. 4645.
Toppan, A. 3981.
Toran-Diaz, I. 7514.
Torev, A. 9113.
Torgov, V.I. 8331.
Torgovanova, T.V. 7148.
Tori, K. 4360, 4361.
Tori, K. 5315.
Tori, T. 4395, 8875, 8876.
Tonkita, A. 8902, 9766, 9789, 9790.
Torpova, E.G. 2590, 9186.
Torpy, U. 2127.
Torpy, M.F. 2609, 5137.
Torrance, L. 3530.
Torras, M.A.C. 4542.
Trotzsch, W. 3433.
Trotzsch, W. 1653.
Truant, A.L. 9837.
Truchet, G. 3239, 6576.
Truchet, G.L. 1508.
Truckenbrodt, G. 3801.
Truckees, M.W. 3831.
Trudel, M. 1740, 3468.
Trudgill, P.W. 1881.
Truelove, B. 2382.
Trujillo, E.E. 1222.
Turman, M.L. 5235.
Tushnet, R. 1610.
Tusov, A.V. 9692.
Trust, T.J. 7290.
Tsagarakis, J. 5269.
Tsai, C.M. 6728.
Tsai, J.H. 4945, 9340.
Tsai, Y. 7886.
Tsami, A. 8080.
Tsao, G.S. 3753.
Tsao, G.T. 5535, 6572, 8398, 9232, 9236.
Tsao, J. 6024.
Tscheape, H. 3302, 5166.
Tscherner, K. 4822.
Tschumi, P. 9280.
Tselentis, J. 7124, 7185.
Tseng, C.H. 5732.
Tseng, W.-C. 7104.
Tsun, Y. 6714, 9828.
Tsibri, A. 7592.
Tsilbaskaya, M.I. 2385.
Tsitovskiy, G. 9146.
Tsonova, D.P. 6159.
Tsuroutoglou, W. 7185.
Tsuchida, Y. 1909, 7315.
Tsuchida, T. 8799.
Tsuchihashi, H. 6578.
Tsuchi, A. 7558.
Tsuchiya, K. 352.
Tsuchiya, M. 3422, 6152.
Tsuchiya, T. 4395, 8875, 8876.
Tsuchiya, Y. 7169.
Tsuge, H. 942, 6553.
Tsugita, A. 961, 7388.
Tsui, H. 8028.
Tsui, K. 5379, 9707.
Tsui, T. 292, 6714.
Tsujita, Y. 7552, 8872.
Tsukada, M. 673.
Tsukagoshi, N. 8296.
Tsukamoto, K. 2810, 7896, 8024, 8031.
Tsukamoto, L.F. 2490.
Tsukamura, M. 671, 1800, 7912, 8898, 9486, 9487.
Tsukuma, M. 3654.
Tsukura, H. 8888.
Tsukur, M. 3434.
Tsumon, H. 55, 7411.
Tsumoto, K. 4104.
Tsumezuka, M. 1559, 2433.
Tsurumi, K. 8786.
Tsuruoka, T. 3716, 4570, 6135.
Tsuchima, S. 4299.
Tsutsumi, M. 4290, 4291.
Tsutsumi, S. 235, 1066, 1067.
Tsuzyu, K. 8820, 8904.
Tsvetkov, I.S. 8116.
Tsvetkov, V.S. 5396.
Tsvetkov, A.I. 3450.
Tsyganov, A.V. 6256.
Tsyganov, V.A. 778, 6233, 7123, 7171, 8021.
Tsyganova, I.V. 1662.
Tsyuryupa, S.N. 7356.
Tu, C.M. 579, 3247, 8625, 8704.
Tu, J.C. 4933.
Tu, S.C. 2800.
Tubaki, K. 2576.
Tubb, P.S. 1989, 4547.
Tucker, C.L. 598.
Tucker, J.F. 2637.
Tuckwell, H.C. 366.
Tueske, M. 2126.
Tuite, J. 9451.
Tuchman, J.F. 6836.
Tui, M.F. 6458.
Tukei, P.M. 9011.
Tulskaya, Ye.M. 3201, 4226.
Tulchinskaya, V.P. 7957.
Tulinsky, A. 2791.
Tully, J.G. 2687, 3968, 5665.
Tulp, P.G. 3863.
Tumanova, L.G. 7298.
Tumura, C. 3435.
Tunblad-Johansson, I. 1843.
Tunlid, A. 7240.
Tuntolaavest, M. 5304.
Tuomi, P. 4184.
Tuovinen, O.H. 7864, 8709.
Turano, A. 4363.
Turchetti, T. 6922.
Turck, M. 2528.
Turck, M. A. 5175.
Turpe, P.J. 8790.
Turk, V. 5496.
Turkina, M.V. 4697.
Turmanidze, C.S. 8293.
Turnbull, P.C.B. 1081.
Turne, A. 9739.
Turner, A. 5196, 5438.
Turner, G.L. 9615.
Turner, J.G. 1350.
Turner, J.T. 9321.
Turner, K.W. 8460, 8461, 8462.
Turner, P.D. 7679, 7682.
Turner, R. 3493.
Turner, V. 9322.
Turner, W.B. 3637.
Turnowsky, F. 2437, 6214, 9717.
Turpen, T. 9865.
Turlon, L.J. 4551.
Turlon, L.J. 4551.
Tushchitskij, G.J. 5344.
Tutelyan, V.A. 6688, 6694.
Tutlane, V. 9672.
Tuttle, J.H. 7404.
Tweardy, D.J. 8817.
Twiss, W. J. van den 5467.
Tweten, R.K. 2081.
Twett, R.C. 1664.
Twiddy, E.M. 8524.
Tyagi, S.N.S. 2205.
Tyaglov, B.V. 8865.
Tyber, B. 8184.
Tyler, M.E. 5527.
Tyndall, R. 3347.
Tyndall, R.L. 3475.
Tyndova, S. 8811.
Tyumentseva, I.S. 2593.
Tyun, V.S. 7884.
Tzan, N.F. 9836.
Tzean, S.S. 9545.

Author Index

- Ueda, S. (continued)
8839, 9139, 9230
Ueda, Y. 3385
Uedono, S. 8402
Uehara, M. 5566
Uehi, Y. 8906
Ueno, P. 6572, 9236
Ueno, K. 5518
Ueno, T. 301
Ueno, Y. 287, 8520
Uesugi, Y. 5590, 8725
Ueyama, I. 3155
Ueyama, Y. 3286
Uhl, C. 2307
Uhr, P. 195
Uhlinger, D.J. 5365
Uhm, T.B. 71
U, M. 302
U, S. 7505
U, T. 4932
Uichiro, E. 9644
Ujimar, T. 8203
Ujita, S. 4635, 6428
Ukai, S. 7453
Ukasevich, E.Yu. 7862
Ulbert, S. 3656
Ulbrich, K. 7913
Ulbrich, M. 9280
Ulhova, B. 9614
Ulezio, I.V. 1864
Ulicka, C. 3836
Ulkowski, S. 8917
Ulmann, U. 4369
Ulica, M. 243
Ulrich-Eberius, C.J. 3055
Ulmer, D. 5588, 5589, 8308
Ulmer, D.C. 6644
Ulrich, J.A. 6081
Ulrich, J.T. 3561
Ulychova, M. 2103, 2175, 2728
Umberger, H.E. 3724
Umehara, K. 7451
Umemoto, K. 5442
Umemoto, T. 6223, 8025
Umemura, I. 1960
Umemura, Y. 6828
Umezawa, H. 1539, 1651, 1655,
1658, 2809, 2823, 3422, 3717,
3737, 4395, 4399, 4416, 4423,
5539, 5539, 6219, 6220, 6221,
7055, 7449, 7452, 8389, 8853,
8918, 9202, 9662, 9778
Umezawa, I. 6059
Umezawa, S. 4395, 8875, 8876
Umezawa, Y. 4399
Umori, J.U. 8067
Umrainia, A.R. 2260
Unchaisangkas, D. 5770
Unden, G. 51
Underdal, B. 5618
Umemoto, T. 1674
Unestam, T. 533, 6918
Ungemach, F.S. 7500
Unger, E. 7428
Unis, S.I. 2184
Uno, J. 9679
Unowsky, J. 9715
Unruh, J. 1397, 1402
Uotani, K. 2809
Uozumi, T. 9219
Upadhyay, R.S. 2987, 5694
Upadhyay, S.M. 6665
Upadhyay, G. 3099
Upadhyaya, M.N. 9612
Upadhyaya, S.D. 561
Upitis, A.A. 9110
Uppal, P.K. 2600
Upper, C.D. 8642, 8643
Urabe, S. 2513
Ure, T. 4502
Uramoto, M. 4396, 7288
Urano, N. 1976
Urban, Z. 3004
Urbasch, I. 695
Urena, J.L. 3421
Urakami, T. 3421
Urias, B.A. 9662
Uritani, I. 3095
Urs, R. 1304
Ursinbaeva, D.Yu. 1983
Usami, S. 3257
Usami, J. 7145
Ushijima, R. 3737
Ushijima, S. 115
Usmani, S.M.H. 1513
Usmanov, R.A. 6551, 6555, 7353,
7355
Usmanova, L.P. 8962
Usui, N. 6565
Usui, T. 8302
Utawaga, T. 981
Uthred, R.S. 1260, 1426, 4103,
4648, 6592, 6972, 8633
Utting, B.V. 9822
Utting, J.M. 4641
Uusi-Rauva, A.K. 6652
Uvarov, A.V. 5630
Uvarova, R.N. 5661, 7635
Uvizi, M. 3460, 3470
Uwajima, T. 8300
Uyeda, M. 1525
Uymoto, J.K. 1191, 2116, 4949,
5724
Uytendaele, P. 3253
Uzakova, I. 2163
Uzman, S. 8057
Uzuka, Y. 1971
Vaamonde, G. 864
Vaananen, P. 9894
Vaara, M. 7158, 8783
Vaara, T. 7158
Vacek, K. 2500, 3487
Vacek, V. 9007
Vachon, D.T. 5306
Vacke, J. 2120, 2728
Vadehra, D.V. 270, 2907
Vaehtanen, P. 1715, 7201
Vaennard, T. 3696
Vagera, J. 2094
Vaheri, A. 9894
Vahine, A. 9843
Vaidya, H.C. 7650
Vaidya, B.K. 7492, 8152
Vaidyanathan, C.S. 3674, 4193
Vaino, M.L.R. 9089
Vainshva, J. 6100
Vashnava, K. 7077
Vakhobov, A.Kh. 9436
Vaksiv, A.K. 7895, 7905
Vakulenko, S.B. 2394
Valasinas, A. 9206
Valcavi, U. 3342
Valdivia, E. 5517
Valdivia, M. 3856
Valdembois, P. 6049
Valencia, G. 5029
Valencia, V. 2172
Valente, C. 4333
Valenti, P. 5181, 6014
Valentini, G. 6422
Valenzi, C. 3495
Valisena, S. 92
Valisena, P. 7033
Valis, G.E. 3651
Valand, M. 3837
Vallaperta, P. 9747
Vallee, B.L. 2770, 8277
Valles, B. 4867
Vallejo, C. 7145
Valles, P. 5564
Valtanen, J. 4164
Valtz, A. 2645, 8890
Valueva, T.A. 7348
Valverde, R.A. 333, 337
Valva, G. 2433
Van Adrichem, J.C.J. 4118
Van Affen, N.K. 1114, 4165, 9322
Van Assche, C. 3253
Van Assche, P.F. 5301
Van Beek, C.G.E.M. 3488
Van Beelen, P. 9021
Van Beumen, J. 2788
Van Bekkum, H. 4261
Van Berie, C. 5015
Van Birkel, W.J.H. 954, 8275
Van Berkum, P. 6987, 8533,
8895, 8700
Van Booven, C.P.A. 6147
Van Buizen, P.G. 6913
Van Caeselele, L. 2188
Van Camp, B. 6074
Van Cleemput, O. 9567
Van Cutsem, J. 5178, 5182, 5202
Van de Boom, M. 8812
Van De Bund, C.F. 618
Van de Merwe, J.P. 8812
Van de Steene, F. 2046
Van de Werf, R. 5100
Van Deiff, R. 4430
Van Deiff, R.W. 6300
Van den Berg, L. 4435
Van den Bosch, H. 3703
Van den Breen, L. 2467
Van den Eynde, E. 3476, 8396, 8932
Van den Hemde, J.H. 4261
Van den Hende, R. 7758, 7759
Van den Heuvel, J. 9332
Van den Heuvel, J.C. 5308
Van den Mooter, M. 362
Van den Oosterkamp, P.F. 4261
Van der Auwer, P. 5197
Van der Baan, J.L. 4405, 4406, 8916
Van der Geest, P.S. 984
Van der Graaf, M. 3001
Van der Graaf, N.A. 8864
Van der Groen, G. 3534
Van der Hoeven, E.P. 5836
Van der Kooij, D. 2651, 3488
Van der Kreek, D.M. 1801
Van der Laan, W.F.M. 4737
Van der Linden, M.P. 2553,
7054, 7154
Van der Merwe, L.P. 9465
Van der Merwe, P.J.A. 9465
Van der Nat, J.M. 7270
Van der Ros-Van de Repe, J. 7924
Van der Sluis, W.G. 7270
Van der Stege, H.J. 4876
Van der Stuyf, L. 3418
Van der Sypt, H. 7469, 8386
Van der Vies, S.M. 6405
Van der Voel, G.B. 7061
Van der Vossen, H.A.M. 479, 1341
Van der Walt, J.P. 8407
Van Dijken, J.P. 32, 98
Van Dongen, M.B. 966
Van Doorne, H. 1801, 2561
Van Doorslaer, E. 6436
Van Doorn, H.J.M. 9431
Van Dyck, E. 4334, 4353, 9711
Van Dyke, C.G. 4166
Van Eijk, G.W. 5358, 6584, 6605
Van Elsas, J.D. 5961
Van Embden, J.A. 3295
Van Etten, H.D. 8434
Van Ethen, J.L. 783
Van Eybergen, C.G. 4261
Van Furth, R. 7061
Van Gerven, F. 5178
Van Gestel, M. 5273
Van Ginkel, C.G. 3262, 9063
Van Hecken, A. 2584
Van Heerden, F.R. 6696, 6700, 6702
Van Heyningen, S. 4906
Van Hoof, J. 5404
Van Jaarsveld, J.S. 9467, 9485
Van Kessel, C. 7843
Van Kleef, B.H.A. 5361
Van Klingeren, B. 3295
Van Kranen, H.J. 1714
Van Laar, W. 2709
Van Laere, A.J. 9130
Van Laethem, Y. 3400
Van Landuyt, H.W. 4365
Van Lear, G.E. 5244
Van Leeuwen, W.J. 5161
Van Loon, L.C. 4095
Van Maanen, J.H. 8358
Van Montagu, M. 4716, 4922
Van Neerven, A.R.W. 9193
Van Nes, W.J. 4261
Van Nieuwkoop, J.G.M. 4908, 7022
Van Rensburg, P.A.J. 8938
Van Rhee, R. 4848
Van Rooy, G. 643
Van Schothorst, M. 8111
Van Steens, G. 6300
Van Uden, N. 1518, 1563, 8394
Van Vaerenbergh, J. 2918
Van Veld, P.A. 3783
Van Veldhuizen, G. 7924
Van Verseveld, H.W. 5117
Van Westen, C.J. 6795
Van Wezel, A.L. 6300
Van Wierlin, J.E. 3658
Van Wijnbergen, L.J. 3295
Van Wyk, C.W. 879
Van Zaayen, A. 2218, 4118
Vanachter, H. 2422
Vance, C.P. 9613
Vance, P.H. 2517
Vanco, B. 2104, 2251
Vancura, Y. 4141
Vandamme, E.J. 3775, 4510,
8261, 9151
Vandecasteele, J.-P. 7406
Vandecasteele, J.-P. 4069, 8325
Vandecasteele, M. 1025
Vanden Bergh, A. 6059
Vanden Bergh, E. 9711
Vanden Boscche, H. 5182
Vanden Broecke, C. 6074
Vandenbergh, P.A. 6642
Vandenplanck, J.E. 9998
Vanderzant, C. 185, 217, 231,
261, 2032, 2935, 4808
Vaneck, G. 7178, 2245
Vaneck, Z. 282, 2744, 3636,
5540, 8016, 8034, 8885
VanEtten, H.D. 1033, 3779
Van, M. 8288
Vanhook, R. 2595
Vankova, S. 6254
Vansteenkiste, G.C. 5362
Vantomme, R. 419
Vanwetswinkel, G. 8358
Varadaraj, M.C. 2058, 2965
Varado, P.E. 92, 3992, 8011
Vardanis, A. 6571
Vardar, F. 753, 1616
Vardhan, V. 7756
Varel, V.H. 1039
Vargas, J.M., Jr. 6010
Varma, A. 5042, 5673, 5691,
5808, 5813
Varney, D.R. 7499
Varney, E.H. 1241
Varonous, D. 8753
Varotto, F. 6080, 6189
Varra, T. 7159
Varra, T. 7159
Varshney, C.K. 7851
Vartak, H.G. 8304
Vartanian, L.S. 7512
Vartoshchev, Yu.E. 5521
Vashon, R.D. 2611, 2612, 5596
Vasi, I.G. 8752
Vasilenko, E.G. 6057, 6228
Vasileva, K.V. 2260
Vasilevsky, I.A. 1902, 7595, 7958
Vasilev, V.B. 1703, 5303, 8849
Vasiliyev, N.S. 3279
Vasiliyeva, L.I. 5521
Vasiliyeva, N.G. 7972, 8862
Vasina, T.A. 2522
Vassanyi, R. 2995
Vasquez, W.E. 1530
Vassily, G.N. 8641
Vassiladis, P. 4766, 4789
Vassudeva Rao, M.M. 4061
Vasyurenko, Z.P. 8895
Vater, G.F. 9700
Vater, J. 6494
Vaughan, F. 4811
Vaughn, J.M. 1711, 5328
Vavilin, V.A. 788
Vavilin, V.A. 1703, 5303, 5330,
8948, 8949
Vavrova, M. 7425
Vazquez, D. 2555
Vazquez, G. 40
Vazquez, G.F. 5682
Vazzana, C. 9589
Vodnova, N.V. 1948
Vocchiat, M. 2156
Vodova, A.S. 1866
Vocci, C. 7383
Vedenyapina, Z.S. 6102
Vedera, J.C. 7287
Vedrina, E.A. 3388, 7968
Veeder, G. 980
Vengchen, G.S. 8432
Veenhuis, M. 1685
Veenhuis, M. 98
Vega, D. 9976
Vega, J. 2524
Vega, J.R. 2914
Vegh, R. 4848
Vehmaenperae, J. 8371
Veide, A. 3733, 7325
Veiga, M. 9769, 9771
Veillet-Poncet, L. 4828
Veijlsma, R. 6114
Vekshin, G.A. 518
Vela, M.C.M. 3421
Veliky, I.A. 4666, 8410, 8959, 9067
Velin, D. 7633
Veljanov, D. 6056
Velvis, H. 6789, 9429
Venzelboer, C.T.M. 4572
Venables, W.A. 4694
Venci, B. 9115
Vendrig, J.C. 3060
Venema, G. 9121
Vengiarick, J.S. 1131 3408
Venkataraman, M.N. 4222
Venkatarao, G. 1169
Venkateswarlu, B. 1473
Venkaya, D. 5351
Venkatasubramanian, T.A. 6430
Vennes, J.A. 5338
Vennosa, A. 3195
Ventullo, R.M. 6264
Ventura, W. 2358
Venugopalan, A.T. 1534
Venyaninov, S.Yu. 1838, 7298
Veracht, H. 3476, 6247,
8396, 8932
Verbeke, F.C.M. 3001
Verbeke, N.J. 586
Verbeke, R. 2584
Verbina, N.M. 2456
Verbit, L. 2584, 6121
Vercherre-Bear, C. 4366
Verstau, A. 7147
Vared, Y. 8442
Vereshchagin, P.V. 6639
Vergin, H. 6036
Vergnaud, M. 4350
Verhaegen, J. 6121
Verheyden, J.P.H. 5217
Verhoeff, K. 5794
Verhoeven, T. 5196
Verhulst, A. 5576
Verma, A.K. 7796
Verma, H.N. 7771
Verma, N.K. 1472, 9549
Verma, R.N. 7795
Verma, R.P. 7796
Verma, S.K. 3976
Verma, V.S. 1369, 5671, 5705,
Vermuelen, H. 9379
Vernerova, J. 7518
Veronese, F.M. 4638
Verrall, M.S. 1663
Verrips, C. 70, 877
Verrips, T. 4848
Versteld, H. 3796
Versini, G. 7612
Versluis, J. 4843
Verstraete, W. 4843, 5100
Verstey, J. 2246
Vertogradova, T.P. 7166
Vertuani, G. 2478, 5875
Vernis, J.J. 7383
Verweij-Van Vught, A.M.J.J. 8131
Veschambre, H. 130
Vesela, D. 2068
Veselenak, J.M. 1528
Veselovsky, I.V. 7862
Vesely, D. 9404
Vesely, J. 2063
Vesilind, P.A. 1697
Vesper, S.J. 9321
Vestal, J.R. 1061, 2023, 3509, 954
Vestal, R. 1995
Vestergaard, H.J. 9404
Vetter, R.L. 2324
Vettori, G. 6127
Vey, A.J. 1004
Vezina, C. 6209, 6210
Vicale, T.J. 1711
Vicari, C. 6, 7373
Vicini, E. 2494
Vicknava, S.A. 8873
Victoria, R. 4246
Victoria, R.L. 9609
Vidaud, C. 6650
Vidaver, A.K. 2114, 4966, 5843
Vidmar, R. 9665
Vidoli, R. 9067
Vidon, D.J.-M. 8727
Vidweg, H. 6349
Vierra, J.C. 1429
Viers, P. 4452
Vieljeux, P. 3532
Vieth, G. 8023
Vieth, G. 7678
Vigevani, A. 2561, 4390, 5260
Vignais, P.N. 1833, 3693
Vignais, P.V. 4687, 8268
Vigne, R. 2851
Vigneau, C. 1681
Vigo, G. 295
Vihayagharavan, M. 3663
Vikraman Nair, R. 3842
Viktorova, L.S. 2456
Viktorova, G.A. 518
Vilas, C. 3358
Vilela, J. 3348
Vilena, S. 8474
Viljanov, P. 8783
Villas, E. 6391
Villegas, L.H. 7802
Villegas, D. 44, 4685
Villadsen, J. 7326
Vilalón, B. 1175
Villareal, R. 9976
Villcourt, P. 3616
Villevet, F. 6251
Vinograd, A.V. 2390
Vinas, I. 2069
Vincelette, J. 9916
Vincent-Sealy, L. 1305
Vincent, J.M. 8177
Vincek, G. 2422
Viney, C. 857
Vining, L.C. 2560, 4388, 6161, 83
Vinogradov, E.V. 3713, 4700
Vinogradova, I.D. 5661, 7635
Vinson, J.R. 3702
Vintler, F.P. 6956, 8662
Vina, F. 2493
Vintler, A.P. 6146
Viranyi, F. 3967, 4060, 4066
Virginia, R.A. 3210
Virk, D.S. 5712
Virto de Santo, A. 4137
Visalakshi, A. 4251
Visca, P. 4648, 4645
Visconti, A. 7615
Vishnyakova, Z.V. 1449
Vishniak, S.S. 3626
Vishnyakova, T.A. 2681
Vishwanath48
Vishvostky, E.S. 8372
Visher, J. 4648, 4645
Vissers, S. 5914, 5916
Vistnes, A.J. 9966
Viswanatha, T. 948
Viswanathan, L. 8210

- Vita, A. 9164.
Vitolo, M. 5490.
Vityayeva, G.A. 1952.
Vitozzi, L. 4629
Viv, C. 2651.
Vivitskiy, L. 9861.
Vives-Rigo, J. 1938.
Vlachova, G. 355, 2249.
Vlach, D. 8418.
Vladyko, A.S. 1546, 9635.
Vlahov, R. 5529.
Vogels, R. 6692, 6696, 6698, 6700, 8506.
Vlietnick, A.J. 6069.
Voelker, B. 709.
Voelter, W. 120.
Vogel, R. 3970.
Vogels, G.D. 4576, 4577, 9021.
Voges, R. 8343.
Voiculescu, R. 2657.
Voinescu, V. 7130.
Vot, E.O. 7522, 7523, 7524.
Votkova, G. 3758.
Votek, V. 1974, 6395, 7501.
Votich, R. 7520.
Volesky, B. 145, 1052, 1528.
Volfova, O. 3258, 3663.
Volkmann, L.E. 2656.
Volkskoy, V.A. 2462.
Volokva, I.M. 7341.
Voll, D. 8629.
Volna, F. 6030.
Voloch, M. 3753, 5535, 9232.
Volosovets, P.S. 1584.
Volterra, L. 8065.
Volyanskoy, Yu.L. 6029.
Vot, P.A. 4271.
Von Bockelmann, I. 5342.
Von Bretzel, P. 426.
Von Bromsen, S. 2317.
Von der Brille, D. 429, 3072, 3073.
Von der Hude, W. 6708.
Von Graevenitz, A. 9066, 9896, 9972.
Von Hunoldstein, C. 5181.
Von Milczewski, K.E. 982.
Von Nicolai, H. 4682.
Von Sydow, B. 6887.
Von Tersch, M.A. 8044.
Von Tiedemann, A. 9406.
Von Tjensstrom, R.G. 6297.
Von Wright, A. 4715, 8467.
Vondracek, M. 7187.
Voogd, C.E. 5161.
Voordouw, G. 60, 6405.
Vora, K.A. 6649.
Vorobyova, L.I. 113, 1972.
Vorobyova, L.I. 6626.
Vorobyova, L.S. 7966, 8804.
Vorobyova, T.V. 7586.
Vorodina, E.E. 2118.
Vorovieva, A.A. 47.
Voronekko, V.V. 9962.
Vorosh, Yu.S. 5826.
Voroshin, T.M. 7148.
Voropaeva, S.D. 6058, 8830.
Vose, P.B. 9592.
Vose, P.V. 9587.
Vostrov, S.N. 1670.
Votsekko, S.K. 7871.
Votmaki, J.N. 7974.
Vovk, N.I. 7643.
Vovlas, C. 338, 5789, 9420.
Vrain, T.C. 6783.
Vrany, J. 7820.
Vriens, L. 3476, 8932.
Vrsanska, M. 1869.
Vrellova, H. 1048, 1986.
Vrudhula, V.M. 6222.
Vu-Trong, K. 4425.
Vucetic, J. 2076.
Vulfride, J. 5986.
Vulsteke, G. 2209.
Vurman, A. 7864, 8709.
Vuy, A. 729.
Vyas, K.K. 621.
Vyas, K.M. 7491.
Vyskocil, P. 1601.
Vysotsky, V.V. 1599.
Wachsmuth, K. 3299.
Wacker, T. 6392.
Wackerbauer, K. 2869.
Wackett, P.L. 4521.
Wada, K. 8382.
Waddell, A. 1638.
Wade, N.L. 1399, 6835, 7723.
Wadhvani, K. 7705.
Wadowsky, R.M. 1719.
Wadstrom, T. 6721, 9311.
Wadsworth, H.J. 3357.
Wadud Mian, M.A. 4004.
Wafar, D. 5586.
Wagatsuma, M. 6153.
Wagih, E.E. 318, 413, 3113, 9460.
Waginger, H. 3865.
Wagner, F. 4709, 9126, 9160.
Wagner, F.W. 8277.
Wagner, G. 9683.
Wagner, G.H. 576, 5131, 5988.
Wagner, H.N., Jr. 837.
Wagner, R. 120.
Wagner, R.P. 4643.
Wahdan, A.N. 2352.
Wahid, M. 3816.
Wahlin, A. 2695.
Wahlquist, S.P. 3494.
Wahlqvist, L. 2695.
Wahlstrom, E. 9062.
Wahren, B. 6075, 7229.
Wahren, P. 7229.
Wainwright, M. 1718, 3180, 6955.
Walt, D.A. 8106.
Waltz, J.A. 2580, 8908.
Wakabayashi, K. 6453.
Wakao, N. 5134.
Waki, M. 5264, 9786.
Wakimoto, S. 352.
Wakisaka, K. 2024.
Wakisaka, S. 1970, 6511.
Walczak, C.A. 843.
Walden, J. 530.
Walder, M. 7184.
Waldis, R.S. 3137.
Waldrner, R. 8308.
Walder, A.R. 6749.
Waldron, J.K. 4051.
Waler, S.M. 8782.
Waley, S.G. 86.
Walker, A.K. 7656.
Walker, A.L. 8482.
Walker, C. 4187, 5851.
Walker, D.M. 7749.
Walker, G.C. 7481.
Walker, G.M. 690.
Walker, H.L. 1286, 8183.
Walker, J.R.L. 687, 688.
Walker, N.P. C. 2775.
Walker, N.P. 5243.
Walker, R.T. 2899.
Walker, R.T. 5210.
Walker, T. 3702.
Walker, T.A. 8193.
Walkey, D.G.A. 2198, 5815.
Wallace, B.L. 1765.
Wallace, H.A.H. 8600.
Wallace, L.L. 1484.
Wallace, R.J. 2793.
Wallace, R.J., Jr. 2517, 6034, 9657.
Wallace, W. 6997.
Wallach, D. 9698.
Wallis, A. 1626.
Wallis, A.F.A. 9136.
Wallis, J.M. 64.
Wallner, W.E. 7477.
Wallwork, J.A. 5069.
Walmsley-Woodward, D.J. 485.
Walsh, B.J. 6782.
Walshott, D.N. 3954.
Walsh, C.T. 7708, 9175.
Walsh, E.E. 9855.
Walsh, J.A.J. 4618.
Walsh, M.A. 3167.
Walsh, R.C. 1595.
Walsh, R.J. 8154.
Walter, R. 3477.
Walters, D.R. 3931.
Walters, R.A. 1536.
Waltner, H.F. 1183, 1425.
Walton, L. 1522.
Walton, N.I. 8415.
Waluschka, A. 678.
Wan, S.-H. 5020.
Wan, S.K. 708.
Wand, D.L. 7017.
Wandey, C. 927.
Wang, C.W. 9895.
Wang, D.I.C. 9085, 9235, 9756, 9985.
Wang, D.S. 3479.
Wang, H.Y. 9827.
Wang, M. 824.
Wang, M.-L. 7225.
Wang, P. 824.
Wang, P.Y. 146.
Wang, S.S. 144, 8404.
Wang, T. 5120.
Wang, W.-L.L. 5169, 9955.
Wang, W.L. 9977.
Wang, X.-Q. 825, 9016.
Wani, S.P. 9612.
Wania, W. 5529.
Waraich, M.K. 9286.
Warburton, D.J. 1701.
Warcup, J.H. 4223, 5920.
Ward, A.K. 5122.
Ward, B.K. 1767.
Ward, D.C. 7231.
Ward, E.W.B. 503, 2990, 3916.
Ward, G. 183.
Ward, G.E. 9726.
Ward, J.M. 1521, 1523.
Ward, L.R. 1540, 7904.
Ward, M.G. 7479.
Ward, P.C. 1609.
Ward, R.L. 791, 7195.
Wardlaw, A.C. 7630.
Warembourg, F.R. 9603.
Wang, M.J. 3424, 4428, 6211.
Warner, A. 5893, 8672.
Warner, I.M. 9044.
Warner, M. 2514.
Warner, S.A. 1965.
Warner, T.N. 5486.
Warrnisson, T. 7078.
Warneck, D.W. 3624, 5438.
Warren, C. 2550, 4378.
Warren, C.D. 7440.
Warren, H. 6986.
Warren, J.W. 7073.
Warren, R.D., Jr. 5128.
Warren, R.E. 2426.
Warren, S.G. 23.
Wartenberg, E. 2933.
Wartenweiler-Burkhard, G. 3892.
Wartovaara, T. 5872.
Waryzowa, M. 8325.
Was, M. 2247.
Wase, D.A.J. 4442, 8928.
Washington, J.A. II. 836, 1598, 2530, 4327, 5270, 7129, 9012, 9947.
Washington, R.K. 6615.
Wasilaskas, B.L. 7253.
Wasilewski, S. 4783.
Wassel, R.A. 8068.
Wastlund, I. 3163.
Watabe, Y. 6371, 8197.
Watanabe, A. 3829.
Watanabe, I. 2358, 6269, 8891, 9596.
Watanabe, K. 2743, 4583, 5474, 5481, 5518, 6200, 8906.
Watanabe, K.A. 5213, 7096.
Watanabe, M. 5243.
Watanabe, R. 8746, 9318.
Watanabe, S. 5537, 9768.
Watanabe, T. 1862, 2570, 2571, 4290, 4291, 6135, 7435, 8259.
Watanabe, Y. 150, 7144.
Watanakunom, C. 750, 771, 772, 1623, 7986, 7998.
Wat, H. 3968.
Waterman, P.G. 1588.
Waterman, S.C. 2060.
Waterreus, L.P. 9332.
Waters, H. 388, 1205.
Waters, L.J.R. 6868.
Waterson, R.M. 8243.
Waterworth, H. 2092.
Waterworth, H.E. 2159.
Waterworth, P.M. 2449.
Watkins, J.E. 5056.
Watkins, B.J. 6782.
Watling, R. 422, 4026, 8652.
Watson, B. 9394.
Watson, C.E., Jr. 448.
Watson, D.H. 2939.
Watson, D.L. 8122.
Watson, D.W. 2084.
Watson, G.K. 148.
Watson, H.C. 2775.
Watson, J.A.L. 7502.
Watson, K. 6633.
Watson, P.G. 1704.
Watson, S.W. 2956.
Watson, T.F. 4719, 6598, 7224.
Watson, T.G. 2752.
Watt, B. 2527, 6127.
Watt, G.D. 9162.
Watt, K. 9146.
Watters, B.D. 854.
Watts, J.A. 648.
Waygood, E.B. 6413, 6415.
Weagant, S.D. 3604, 3606.
Weathers, L.G. 5019.
Weaver, R.W. 610.
Weaver, S.W. 2915.
Webb, D.P. 4531.
Webb, M.J.W. 4020.
Webb, R.R. 4924.
Webb, R.S. 4159.
Webber, J.A. 5275.
Webber, J.J. 7884.
Webber, A.H. 5187.
Webber, B. 8873.
Webber, C.J. 9655.
Webber, D.E. 9507.
Webber, D.F. 4249, 8700.
Webber, H. 6285.
Webber, H.J. 8110.
Webber, K.A. 3908, 3929.
Webber, M. 5917.
Webber, M.E. 4495.
Webber, O. 9280.
Webster, D.M. 5052.
Webster, H.K. 1589.
Webster, J. 3777, 4180.
Webster, J.M. 3990.
Webster, L.R. 8972.
Webster, R.K. 451, 4959, 7743, 9469.
Webster, R.M. 2689, 9462.
Weckbach, L. 6706.
Weckesle, J. 6332.
Wedler, A.-M. 435.
Wedren, H. 2695.
Weekes, G.C. 7525.
Weeks, M.G. 9983, 9984.
Weeks, R.J. 2723, 4457.
Weigst, W. 157, 6656.
Wehmeyer, A.S. 3846.
Wehner, T.C. 9415.
Wei, C. 4021.
Wei, C.-F. 6507.
Wei, C.J. 17, 7261.
Weibel, F. 7823.
Weide, H. 2904, 6655.
Weidemann, G.J. 9418.
Weidemann, H.L. 6792.
Weidhans, F. 6925.
Weidner, H. 436.
Weidner, N. 6415, 6416.
Weigle, M. 6193.
Weihenlo, U. 1150.
Weijer, W.J. 7400, 7402.
Weijman, A.C.M. 5358.
Weil, D. 5321.
Weil, R. 3306.
Weiland, F. 6290.
Weiland, R.H. 43.
Weiller, B.H. 75.
Weinberg, D.N. 2459.
Weinberg, E. 2455, 3324, 4426.
Weiner, E.A. 4868.
Weinman, R. 8754.
Weinert, J.H. 1912.
Weingartner, P.D. 3112.
Weinhard, P. 3616.
Weinstein, D. 9022.
Weinsten, P. 8997.
Weintraub, M. 5147, 5318.
Wer, P.D. 3724.
Weissberg, D.S. 5378.
Weiser, J. 1832.
Weisgerber, C. 1120.
Weiss, B. 7551.
Weiss, E. 2899, 6307.
Weiss, H. 6486.
Weissberger, B. 4426.
Weissbrodt, E. 7309.
Weisslowicz, H. 6660.
Weitzman, I. 692.
Weitzman, J.R. 4662, 4676, 4677, 5497, 7396.
Wekell, M.M. 5420.
Welachy, T.W. 9454.
Welch, D.F. 727, 5187, 7981.
Welch, D.M. 8757.
Welch, W. 9674.
Weller, D.M. 3153.
Weller, D.L. 3062.
Wellinger, A. 4262.
Wellmann, G. 6329, 6330.
Wells, H.D. 2985, 9320.
Wells, J. 3298.
Wells, J.I. 888.
Wells, J.M. 1153, 6672, 6787.
Wells, J.S. 1609.
Wells, L.G. 4143.
Wells, O.D. 6908.
Wells, R.D. 6507.
Wells, V.E. 752.
Wellso, S.G. 1187.
Welte, W. 6392.
Weltring, K.M. 8434.
Wetly, R.E. 1139, 3914, 4097, 5046.
Wetzel, W. 2185.
Weitz, G. 8607.
Weizel, P. 848.
Wemambu, S.N.C. 7206.
Wempe, J.M. 2925.
Wendell, P.L. 2775.
Wendland, M.F. 2803.
Wendt, R. 6925.
Wendt, R.W. 8623.
Weng, M. 3272.
Wenglar, J. 9675.
Wengler, G. 7292, 7293.
Wengler, B.G. 3494.
Wentstrom, L.J. 813.
Wenske, E.A. 4312.
Wenzel, R.P. 2639, 3267.
Werder, M.E.B. 7212.
Weremowicz, S. 3525.
Wernicke, J. 6074.
Werner, D. 3225.
Werner, H. 4345, 4682.
Werner, P. 1416.
Werner, R.G. 4665.
Wernsmann, E.A. 9433.
Werthsm, J.S. 2071.
Weseloh, R.M. 2832, 3722.
Wesenberg, D. 4970.
Weser, U. 6497.
Wesley, P. 165.
Wessel, H. 8536.
Wesseling, A.C. 5422.
Wesselnik, C. 4529.
Wessels, A. 3001.
Wessels, G.H. 1955.
Wessels, P.L. 6700.
West, A.H. 9636.
West, A.W. 1007.
West, D.R. 8557.
West, J.M. 9004.
West, M. 8097.
West, M.E. 9927.
West, P.A. 2622, 9948.
West, R.L. 244.
West, S.H. 3921.
West, T.P. 2758.
Westby, C.A. 134.
Westcott, B. 2263.
Weste, G. 1463, 3901, 3982.
Westen, S. 6689.
Westen, G. 9743.
Westerdal, N.A.C. 741.
Westerdahl, G. 4486, 6326.
Westerling, J. 2789.
Westermann, P. 8063.
Westfall, H.N. 6307.
Westfall, H.N. 9524, 9930.
Westhoff, D.C. 7565.
Westlake, D.W.S. 1613, 1797, 5597, 6161, 7018, 8717, 8719, 9036.
Westley, J.W. 6208.
Westmacott, D. 7989.
Westoby, M. 6754.
Wetherall, F.M. 4283.
Wetherall, I.D. 7249.
Wetherbee, P.J. 8280.
Wetzel, C. 5818.
Wetzel, W. 5228.
Whalley, M.A. 4585, 9970.
Whalley, A.J.S. 2851, 7497.
Wharton, R.A., Jr. 1475.
Whaun, J.M. 1589.
Wheat, J.L. 9013.
Wheat, P. 9671.
Whitely, M.A. 4585, 9970.
Wheller, B.E.J. 6931.
Wheller, C.M. 5486.
Wheller, C.D. 3462.
Wheller, G.L. 4140.
Wheller, R.E. 4048.
Whelan, W.L. 1528.
Whelan, O.P. 5618.
Whipples, J.M. 3170.
Whitaker, T.R. 9291.
Whitbread, R. 3939, 6769.
Whitby, J.L. 710.
Whitby, R.E. 2687.
White, C.A. 8479.
White, D.C. 2846, 4466, 5365, 5382, 9027.
White, D.R. 6185.
White, E.R. 3402.
White, G.F. 148.
White, G.L. 9023.
White, G.W. 5034.
White, H.U. 9144.
White, J.B. 2223.
White, J.F. 9077.
White, J.G. 6889.
White, J.L. 960, 6779.
White, J.P. 1103.
White, M. 8879.
White, R.A. 1706.
White, R.H. 3657.
White, R.L. 7149.
White, R.P. 890.
White, T.C. 1092.
Whitcross, M.I. 4926.
Whited, G.M. 7404.
Whithead, L.C. 5803.
Whithead, P.R. 6508.
Whitely, M.S. 5335.
Whiteman, P. 4910.
Whiteside, J.O. 7412, 5834, 9497.
Whitford, H. 634, 3287.
Whitford, W.G. 6964.
Whitman, W.B. 9050.
Whitmore, S.C. 2441.
Whitney, A.S. 5115.
Whitney, E.D. 1376, 4096.
Whitney, G. 5829.
Whitney, N.J. 3088.
Whittaker, J.W. 1649.
Whittaker, R.E. 8335.
Whittaker, R.E. 4460.
Whittington, W. 9913, 9917.
Whittington, W.J. 4185, 4043.
Whitwell, J.D. 2195.

Author Index

- Wick, R.L. 4994
Wicken, A.J. 3711.
Wickizer, S.L. 4984
Wicklow, D.T. 2948, 3198, 3715.
Wicks, J.H. 9730
Wicks, T. 1289, 4102.
Wicks, T. 386, 484, 3984, 8629.
Widdowson, F.V. 5830, 5838.
Widdowson, P.T. 2740.
Widen, R. 9937.
Widenheim, J. 9000.
Widemann, G. 3454.
Widin, K.D. 3251.
Widstrom, N.W. 3880, 5653, 6703.
Widy-Wirski, R. 3391.
Wiberg, J. 9358.
Wieczkowska, E. 3836.
Wieczorek, A. 7508.
Wieczorek, L. 9708.
Wieczorek, M. 7360.
Wiedemann, B. 6151, 7036, 7050.
Wieder, R.K. 2351.
Wiegel, J. 1790.
Wien, H.C. 7841.
Wierenga, R.K. 7402.
Wieringa-Brants, D.H. 2986, 8617.
Wierstra, K. 9121.
Wierup, M. 2504.
Wiese, M.V. 376, 380, 4960, 9989.
Wiesmann, U. 8083.
Wiesnorowska, M. 2063.
Wiesand, R. 697, 3544.
Wiedt, B. 8796.
Wigert, H. 5228.
Wigg, M.D. 7948.
Wiggins, T.E. 4117.
Wigmore, A.S. 4794.
Wijnands, R.A. 1880.
Wilkund, G. 9304.
Wilkoström, W.B. 3599.
Wilbert, S. 9406.
Wilcox, D.P. 8069.
Wilcox, G.E. 9014.
Wilke, W.W. 418, 5077, 5873.
Wilkinson, R.D. 351, 3125.
Wild, B.L. 1318.
Wild, G.G. 642.
Wild, G.M. 3377, 6196, 6212.
Wildman, G.B. 3207.
Wildner, N. 489, 1000, 1009.
Wildmuth, G.B. 3205.
Wiley, D.C. 23.
Wiley, P.F. 2566.
Wilhelm, P. 1865.
Wilke, B.-M. 2326, 7801.
Wilkey, 9068.
Wilke, C.R. 11, 9237, 9803.
Wilkes, S.H. 956, 8255.
Wilkie, B.N. 8518.
Wilkins, D.T. 9303.
Wilkinson, B.J. 5148.
Wilkinson, D.G. 831.
Wilkinson, I.D. 7327.
Wilkinson, R.G. 3294, 9174.
Wilkinson, S.G. 4702.
Wikstrom, M. 2026.
Wiks, D.S. 9518.
Wiks, M. 883.
Will, O.H., III 2736.
Williamson, R. 9644.
Willard, J.E. 644.
Wileke, U. 3764, 8434.
Willey, R.W. 4250.
Willey, S. 2531.
Williams, B.L. 8697.
Williams, C.A. 1078.
Williams, D.E. 2759.
Williams, D.F. 9614.
Williams, D.J. 9211.
Williams, E. 5345.
Williams, E. 648.
Williams, F.D. 2016.
Williams, G.R. 1617, 1467, 9377.
Williams, J.D. 2552, 4356, 7982, 9647, 11307.
Williams, L.A. 8399.
Williams, L.E. 4236, 7000.
Williams, N.D. 7728, 7731.
Williams, R.A.D. 9725.
Williams, R.E. 4696.
Williams, R.J. 404, 6777, 9455.
Williams, R.N. 7734.
Williams, R.O. 6640.
Williams, S.T. 4403.
Williams, T.D. 5725.
Williams, T.H. 2822, 6197.
Williams, T.J. 267.
Williams, T.N. 8058, 9629.
Williamson, B. 466.
Williamson, D. 3964.
Williamson, R. 4273, 9651.
Willingale, J. 7506.
Willinger, H. 4861.
Willis, H. 2906.
Willis, L.J. 9.
Willis, W.G. 2240, 4132, 9499.
Willman, N. 4813.
Willis, A. 1803.
Willis, D.J. 3499.
Willis, N.M. 829.
Willie, P.J. 5274.
Willis, R.B.H. 6832.
Willis, W.H. 5749.
Willson, G.B. 6242, 8937.
Wilson, B.J. 6691.
Wilson, C.L. 6351.
Wilson, C.R. 3851.
Wilson, D.B. 6420.
Wilson, D.L. 2116.
Wilson, D.M. 5653, 6703.
Wilson, D.U. 4866.
Wilson, E. 960.
Wilson, G.I. 642.
Wilson, H.W. 4339.
Wilson, J. 5857, 6255.
Wilson, J.D. 9002.
Wilson, J.M. 6944, 8580.
Wilson, K.J. 5782.
Wilson, L. 1278, 5766.
Wilson, L.G. 1245.
Wilson, M.B. 3493.
Wilson, M.W. 1112.
Wilson, S.C. 9441.
Wilson, S.Z. 9840.
Wilson, T.E. 8089.
Wilson, W.R. 836, 9947.
Wimalaewwa, D.L.S. 6804.
Wimpeny, J.W.T. 6341.
Wimberg, J. 880, 5383, 5402.
Winkler, U. 3814.
Wing, R. 4019.
Windle, B.E. 386.
Wing, E.J. 1719.
Wing, P.W.L. 5180.
Wingar, C.R. 8768.
Wingender-Dissen, R. 7359, 8283.
Wingfield, M.J. 5077, 5873.
Winkler, H.H. 3474.
Winkler, U. 1945.
Winkler, U.K. 7412, 8718.
Winn, W.C., Jr. 2459.
Winnicki, T. 8440.
Wiroto Sutarmidjo, R. 8654.
Winship, L.J. 1496.
Winskill, N. 9132.
Winslow, D.L. 5247.
Winstanley, D.J. 2727.
Wiss, G. 6532.
Wipf, B. 7468.
Wipraechtiger, P. 1624.
Wise, P.J. 3298.
Wise, R. 2543, 2554, 5171, 5274, 6141.
Wiseman, P.F. 8611.
Wiseman, A. 1927, 3667, 8179.
Wiseman, D.W. 282, 283, 8505.
Wisniewski, H. 1089.
Wisniewski, J. 3532, 8440.
Wisniewski, T.R. 9822.
Wiss, K. 2517, 6034.
Wiseman, C.L., Jr. 1638.
Wissler, F. 4505.
Wissler, K. 6285.
Witcher, W. 7740.
Witzsch, J.L. 6006.
Witzens, B. 4122.
Witt, L.J. 773.
Witte, W. 2403, 3288.
Witter, L.D. 5360.
Wittinghofer, A. 3641.
Wittler, R. 9070.
Wittmann-Liebold, B. 4566, 4567, 7292, 7293.
Wittmann, H.G. 4563, 4566.
Witzenberger, T. 815.
Wlodawer, A. 7399.
Wofford, D.S. 448.
Wohlhueter, R.M. 9141, 9142.
Wohlpart, D.L. 48.
Wojechowska, H. 8917, 9780.
Wolf-Ullrich, C. 110.
Wolf, D.D. 8420.
Wolf, D.D. 8691.
Wolf, D.H. 1923.
Wolf, G. 4060, 9406.
Wolf, H. 8887.
Wolfe, L.G. 2488.
Wolfe, N.L. 2882.
Wolfe, R.S. 9050.
Wolfe, S. 1613, 1797, 9036.
Wolff, J. 7349.
Wolff, L.F. 8075.
Wolff, W. 7537.
Wolfford, D. 8856.
Wolfova, J. 4347, 4499.
Wolfson, J.S. 3594.
Wolkin, R. 3260.
Wollier, R. 2937.
Wollum, A.G., II 6940, 6993.
Wolter, R. 3850.
Wolters, B. 7266.
Wolitz, S.S. 5841.
Wolverton, B.C. 8958.
Wonsat, A.J. 6475.
Wong, A.M. 651.
Wong, N.P. 7600.
Wong, W.C. 1293, 3051.
Wongkaew, S. 5687.
Woo, J.Y. 9519.
Woo, Q.F. 178.
Wood, B.A. 9575.
Wood, D. 4878.
Wood, D.A. 2923, 6559.
Wood, D.E. 710.
Wood, D.O. 3474.
Wood, E.A. 5120.
Wood, G. 1151.
Wood, J.C. 9967.
Wood, J.M. 4479.
Wood, K.R. 3078.
Wood, L.V. 7594, 9968.
Wood, M. 4235.
Wood, P.M.P. 4852.
Wood, P.M. 4985, 5479, 6524.
Wood, R.K.S. 1412, 5824, 6547, 6877, 8540.
Wood, T. 2767, 6401.
Wood, W. 1461.
Wood, W.A. 5445, 7275.
Woodard, K.E. 5094, 9474.
Woodard, M. 9936.
Woodbridge, W.C. 8573.
Woodburn, M. 219.
Woodcock, C.M. 1108.
Woodcock, P.M. 7063.
Woodcock, T. 8578.
Woodham, R.C. 3070, 5784, 6794.
Woodhead, S.H. 9503.
Woodland, R.M. 8123.
Woodrow, J.R. 2806, 9167.
Woodward, E. 614, 4218.
Woods, P.V. 1447.
Woods, R.D. 7664, 9413.
Woods, T.A.D. 3174.
Woods, V.E. 1554.
Woodward, A. 2866.
Woodward, J. 17, 48, 68.
Wookham, R.C. 469.
Wooley, R.E. 7080, 7595, 8750, 8765.
Yalabik-Kas, H.S. 7932.
Yale, H.L. 8337.
Yamada, H. 77, 107, 1031, 1861, 1895, 1896, 9000, 1982, 3652, 3660, 374, 2815, 7525, 8204, 8381, 8838, 8839, 8840, 9214.
Yamada, J.K. 9939.
Yamada, O. 8166.
Yamada, T. 1, 2778, 3681, 7047.
Yamaguchi, Y. 981, 5251, 5552, 6690, 7417, 8207.
Yamagata, T. 4437, 6288.
Yamagishi, H. 6340.
Yamagishi, J. 5190.
Yamaguchi, A. 6087, 7180.
Yamaguchi, H. 4301.
Yamaguchi, I. 5827.
Yamaguchi, T. 2427, 2435, 3426, 3428, 6153, 6194, 6213.
Yamakawa, K. 2091, 2886, 6719.
Yamak, M. 7079.
Yamakura, F. 6561.
Yamamoto, K. 3947.
Yamamoto, B.T. 4996.
Yamamoto, D.T. 1218.
Yamamoto, H. 1539, 1894, 1954, 3318, 3952, 6059.
Yamamoto, K. 2579, 2668, 2591, 5315, 8616.
Yamamoto, K.-I. 6215.
Yamamoto, M. 325.
Yamamoto, S. 6477.
Yamamoto, T. 3270, 4923.
Yamamoto, Y. 3327, 7456, 9223, 9906.
Yamane, H. 8628.
Yamamura, Y. 8327.
Yamanaka, H. 1894, 5428.
Yamanaka, K. 6519.
Yamanaka, S. 981.
Yamane, K. 5255, 9217.
Yamane, N. 9883.
Yamane, T. 3751, 8164.
Yamanishi, K. 7897.
Yamano, H. 4581, 8204.
Yamano, Y. 1587.
Yamasaki, E. 3560.
Yamasaki, K. 8906.
Yamasaki, N. 6542.
Yamashiro, Y. 3385.
Yamashita, F. 6624.
Yamashita, J. 6489, 6625.
Yamashita, K. 1985, 6620.
Yamauchi, H. 125, 7496.
Yamauchi, J.-I. 6489.
Yamawaki, T. 6325.
Yamaya, S. 8909.
Yamaya, S.-I. 7410.
Yamazaki, H. 5401, 6632, 9067.
Yamazaki, M. 5241, 6586, 7422, 8.
Yamazaki, N. 3423.
Yamazaki, Y. 50.
Yanagi, M. 4306.
Yanagigara, Y. 7442.
Yanagihara, Y. 8330.
Yanagimachi, K. 9707, 9815.
Yanagiya, K. 8668.
Yanchevsky, V.K. 9229.
Yang, C. 5478.
Yang, C.K. 286.
Yang, C.Y. 8278, 8631.
Yang, H. K. 7019.
Yang, S.M. 1278, 5766, 9444.
Yang, S.S. 6976, 9103.
Yang, X.-F. 821.
Yanicki, Q. 8459.
Yanko, U. 6834.
Yano, K. 3398, 5144, 8009.
Yanofsky, M.T. 23.
Yanover, L. 3504.
Yanover, S.B. 511, 1055, 9553, 961.
Yanovsky, A.C. 2390, 2725.
Yarmoff, J.-J. 2816.
Yaro, R. 155.
Yarosh, W. 4429.
Yaroslavseva, N.G. 6173.
Yarovenko, V.L. 8087.
Yashima, S. 3697.
Yasmeen, A. 7697.
Yassin, A.M. 1277, 2199, 8614.
Yasuda, J. 3526.
Yasuda, N. 6087.
Yasuda, T. 735, 1982, 3385, 5430, 7144.
Yates, L.R. 2362.
Yates, M.D. 2419.
Yates, C. 2006.
Yagci, M. 5568, 8323.
Yaguchi, S. 313.
Yajima, M. 302.
Yalchik, R.W. 1143.
Yakovleva, E.P. 6233, 6548, 8021.
Yakovleva, V.I. 4579.
Yakutsk, A.F. 7299.
Yakushkina, I.V. 1619.
Wooley, R.E. 7080, 7595, 8750, 8765.
Yalabik-Kas, H.S. 7932.
Yale, H.L. 8337.
Yamada, H. 77, 107, 1031, 1861, 1895, 1896, 9000, 1982, 3652, 3660, 374, 2815, 7525, 8204, 8381, 8838, 8839, 8840, 9214.
Yamada, J.K. 9939.
Yamada, O. 8166.
Yamada, T. 1, 2778, 3681, 7047.
Yamaguchi, Y. 981, 5251, 5552, 6690, 7417, 8207.
Yamagata, T. 4437, 6288.
Yamagishi, H. 6340.
Yamagishi, J. 5190.
Yamaguchi, A. 6087, 7180.
Yamaguchi, H. 4301.
Yamaguchi, I. 5827.
Yamaguchi, T. 2427, 2435, 3426, 3428, 6153, 6194, 6213.
Yamakawa, K. 2091, 2886, 6719.
Yamak, M. 7079.
Yamakura, F. 6561.
Yamamoto, K. 3947.
Yamamoto, B.T. 4996.
Yamamoto, D.T. 1218.
Yamamoto, H. 1539, 1894, 1954, 3318, 3952, 6059.
Yamamoto, K. 2579, 2668, 2591, 5315, 8616.
Yamamoto, K.-I. 6215.
Yamamoto, M. 325.
Yamamoto, S. 6477.
Yamamoto, T. 3270, 4923.
Yamamoto, Y. 3327, 7456, 9223, 9906.
Yamane, H. 8628.
Yamamura, Y. 8327.
Yamanaka, H. 1894, 5428.
Yamanaka, K. 6519.
Yamanaka, S. 981.
Yamane, K. 5255, 9217.
Yamane, N. 9883.
Yamane, T. 3751, 8164.
Yamanishi, K. 7897.
Yamano, H. 4581, 8204.
Yamano, Y. 1587.
Yamasaki, E. 3560.
Yamasaki, K. 8906.
Yamasaki, N. 6542.
Yamashiro, Y. 3385.
Yamashita, F. 6624.
Yamashita, J. 6489, 6625.
Yamashita, K. 1985, 6620.
Yamauchi, H. 125, 7496.
Yamauchi, J.-I. 6489.
Yamawaki, T. 6325.
Yamaya, S. 8909.
Yamaya, S.-I. 7410.
Yamazaki, H. 5401, 6632, 9067.
Yamazaki, M. 5241, 6586, 7422, 8.
Yamazaki, N. 3423.
Yamazaki, Y. 50.
Yanagi, M. 4306.
Yanagigara, Y. 7442.
Yanagihara, Y. 8330.
Yanagimachi, K. 9707, 9815.
Yanagiya, K. 8668.
Yanchevsky, V.K. 9229.
Yang, C. 5478.
Yang, C.K. 286.
Yang, C.Y. 8278, 8631.
Yang, H. K. 7019.
Yang, S.M. 1278, 5766, 9444.
Yang, S.S. 6976, 9103.
Yang, X.-F. 821.
Yanicki, Q. 8459.
Yanko, U. 6834.
Yano, K. 3398, 5144, 8009.
Yanofsky, M.T. 23.
Yanover, L. 3504.
Yanover, S.B. 511, 1055, 9553, 961.
Yanovsky, A.C. 2390, 2725.
Yarmoff, J.-J. 2816.
Yaro, R. 155.
Yarosh, W. 4429.
Yaroslavseva, N.G. 6173.
Yarovenko, V.L. 8087.
Yashima, S. 3697.
Yasmeen, A. 7697.
Yassin, A.M. 1277, 2199, 8614.
Yasuda, J. 3526.
Yasuda, N. 6087.
Yasuda, T. 735, 1982, 3385, 5430, 7144.
Yates, L.R. 2362.
Yates, M.D. 2419.
Yates, C. 2006.
Yagci, M. 5568, 8323.
Yaguchi, S. 313.
Yajima, M. 302.
Yalchik, R.W. 1143.
Yakovleva, E.P. 6233, 6548, 8021.
Yakovleva, V.I. 4579.
Yakutsk, A.F. 7299.
Yakushkina, I.V. 1619.
Wooley, R.E. 7080, 7595, 8750, 8765.
Yalabik-Kas, H.S. 7932.
Yale, H.L. 8337.
Yamada, H. 77, 107, 1031, 1861, 1895, 1896, 9000, 1982, 3652, 3660, 374, 2815, 7525, 8204, 8381, 8838, 8839, 8840, 9214.
Yamada, J.K. 9939.
Yamada, O. 8166.
Yamada, T. 1, 2778, 3681, 7047.
Yamaguchi, Y. 981, 5251, 5552, 6690, 7417, 8207.
Yamagata, T. 4437, 6288.
Yamagishi, H. 6340.
Yamagishi, J. 5190.
Yamaguchi, A. 6087, 7180.
Yamaguchi, H. 4301.
Yamaguchi, I. 5827.
Yamaguchi, T. 2427, 2435, 3426, 3428, 6153, 6194, 6213.
Yamakawa, K. 2091, 2886, 6719.
Yamak, M. 7079.
Yamakura, F. 6561.
Yamamoto, K. 3947.
Yamamoto, B.T. 4996.
Yamamoto, D.T. 1218.
Yamamoto, H. 1539, 1894, 1954, 3318, 3952, 6059.
Yamamoto, K. 2579, 2668, 2591, 5315, 8616.
Yamamoto, K.-I. 6215.
Yamamoto, M. 325.
Yamamoto, S. 6477.
Yamamoto, T. 3270, 4923.
Yamamoto, Y. 3327, 7456, 9223, 9906.
Yamane, H. 8628.
Yamamura, Y. 8327.
Yamanaka, H. 1894, 5428.
Yamanaka, K. 6519.
Yamanaka, S. 981.
Yamane, K. 5255, 9217.
Yamane, N. 9883.
Yamane, T. 3751, 8164.
Yamanishi, K. 7897.
Yamano, H. 4581, 8204.
Yamano, Y. 1587.
Yamasaki, E. 3560.
Yamasaki, K. 8906.
Yamasaki, N. 6542.
Yamashiro, Y. 3385.
Yamashita, F. 6624.
Yamashita, J. 6489, 6625.
Yamashita, K. 1985, 6620.
Yamauchi, H. 125, 7496.
Yamauchi, J.-I. 6489.
Yamawaki, T. 6325.
Yamaya, S. 8909.
Yamaya, S.-I. 7410.
Yamazaki, H. 5401, 6632, 9067.
Yamazaki, M. 5241, 6586, 7422, 8.
Yamazaki, N. 3423.
Yamazaki, Y. 50.
Yanagi, M. 4306.
Yanagigara, Y. 7442.
Yanagihara, Y. 8330.
Yanagimachi, K. 9707, 9815.
Yanagiya, K. 8668.
Yanchevsky, V.K. 9229.
Yang, C. 5478.
Yang, C.K. 286.
Yang, C.Y. 8278, 8631.
Yang, H. K. 7019.
Yang, S.M. 1278, 5766, 9444.
Yang, S.S. 6976, 9103.
Yang, X.-F. 821.
Yanicki, Q. 8459.
Yanko, U. 6834.
Yano, K. 3398, 5144, 8009.
Yanofsky, M.T. 23.
Yanover, L. 3504.
Yanover, S.B. 511, 1055, 9553, 961.
Yanovsky, A.C. 2390, 2725.
Yarmoff, J.-J. 2816.
Yaro, R. 155.
Yarosh, W. 4429.
Yaroslavseva, N.G. 6173.
Yarovenko, V.L. 8087.
Yashima, S. 3697.
Yasmeen, A. 7697.
Yassin, A.M. 1277, 2199, 8614.
Yasuda, J. 3526.
Yasuda, N. 6087.
Yasuda, T. 735, 1982, 3385, 5430, 7144.
Yates, L.R. 2362.
Yates, M.D. 2419.
Yates, C. 2006.
Yagci, M. 5568, 8323.
Yaguchi, S. 313.
Yajima, M. 302.
Yalchik, R.W. 1143.
Yakovleva, E.P. 6233, 6548, 8021.
Yakovleva, V.I. 4579.
Yakutsk, A.F. 7299.
Yakushkina, I.V. 1619.
Wooley, R.E. 7080, 7595, 8750, 8765.
Yalabik-Kas, H.S. 7932.
Yale, H.L. 8337.
Yamada, H. 77, 107, 1031, 1861, 1895, 1896, 9000, 1982, 3652, 3660, 374, 2815, 7525, 8204, 8381, 8838, 8839, 8840, 9214.
Yamada, J.K. 9939.
Yamada, O. 8166.
Yamada, T. 1, 2778, 3681, 7047.
Yamaguchi, Y. 981, 5251, 5552, 6690, 7417, 8207.
Yamagata, T. 4437, 6288.
Yamagishi, H. 6340.
Yamagishi, J. 5190.
Yamaguchi, A. 6087, 7180.
Yamaguchi, H. 4301.
Yamaguchi, I. 5827.
Yamaguchi, T. 2427, 2435, 3426, 3428, 6153, 6194, 6213.
Yamakawa, K. 2091, 2886, 6719.
Yamak, M. 7079.
Yamakura, F. 6561.
Yamamoto, K. 3947.
Yamamoto, B.T. 4996.
Yamamoto, D.T. 1218.
Yamamoto, H. 1539, 1894, 1954, 3318, 3952, 6059.
Yamamoto, K. 2579, 2668, 2591, 5315, 8616.
Yamamoto, K.-I. 6215.
Yamamoto, M. 325.
Yamamoto, S. 6477.
Yamamoto, T. 3270, 4923.
Yamamoto, Y. 3327, 7456, 9223, 9906.
Yamane, H. 8628.
Yamamura, Y. 8327.
Yamanaka, H. 1894, 5428.
Yamanaka, K. 6519.
Yamanaka, S. 981.
Yamane, K. 5255, 9217.
Yamane, N. 9883.
Yamane, T. 3751, 8164.
Yamanishi, K. 7897.
Yamano, H. 4581, 8204.
Yamano, Y. 1587.
Yamasaki, E. 3560.
Yamasaki, K. 8906.
Yamasaki, N. 6542.
Yamashiro, Y. 3385.
Yamashita, F. 6624.
Yamashita, J. 6489, 6625.
Yamashita, K. 1985, 6620.
Yamauchi, H. 125, 7496.
Yamauchi, J.-I. 6489.
Yamawaki, T. 6325.
Yamaya, S. 8909.
Yamaya, S.-I. 7410.
Yamazaki, H. 5401, 6632, 9067.
Yamazaki, M. 5241, 6586, 7422, 8.
Yamazaki, N. 3423.
Yamazaki, Y. 50.
Yanagi, M. 4306.
Yanagigara, Y. 7442.
Yanagihara, Y. 8330.
Yanagimachi, K. 9707, 9815.
Yanagiya, K. 8668.
Yanchevsky, V.K. 9229.
Yang, C. 5478.
Yang, C.K. 286.
Yang, C.Y. 8278, 8631.
Yang, H. K. 7019.
Yang, S.M. 1278, 5766, 9444.
Yang, S.S. 6976, 9103.
Yang, X.-F. 821.
Yanicki, Q. 8459.
Yanko, U. 6834.
Yano, K. 3398, 5144, 8009.
Yanofsky, M.T. 23.
Yanover, L. 3504.
Yanover, S.B. 511, 1055, 9553, 961.
Yanovsky, A.C. 2390, 2725.
Yarmoff, J.-J. 2816.
Yaro, R. 155.
Yarosh, W. 4429.
Yaroslavseva, N.G. 6173.
Yarovenko, V.L. 8087.
Yashima, S. 3697.
Yasmeen, A. 7697.
Yassin, A.M. 1277, 2199, 8614.
Yasuda, J. 3526.
Yasuda, N. 6087.
Yasuda, T. 735, 1982, 3385, 5430, 7144.
Yates, L.R. 2362.
Yates, M.D. 2419.
Yates, C. 2006.
Yagci, M. 5568, 8323.
Yaguchi, S. 313.
Yajima, M. 302.
Yalchik, R.W. 1143.
Yakovleva, E.P. 6233, 6548, 8021.
Yakovleva, V.I. 4579.
Yakutsk, A.F. 7299.
Yakushkina, I.V. 1619.
Wooley, R.E. 7080, 7595, 8750, 8765.
Yalabik-Kas, H.S. 7932.
Yale, H.L. 8337.
Yamada, H. 77, 107, 1031, 1861, 1895, 1896, 9000, 1982, 3652, 3660, 374, 2815, 7525, 8204, 8381, 8838, 8839, 8840, 9214.
Yamada, J.K. 9939.
Yamada, O. 8166.
Yamada, T. 1, 2778, 3681, 7047.
Yamaguchi, Y. 981, 5251, 5552, 6690, 7417, 8207.
Yamagata, T. 4437, 6288.
Yamagishi, H. 6340.
Yamagishi, J. 5190.
Yamaguchi, A. 6087, 7180.
Yamaguchi, H. 4301.
Yamaguchi, I. 5827.
Yamaguchi, T. 2427, 2435, 3426, 3428, 6153, 6194, 6213.
Yamakawa, K. 2091, 2886, 6719.
Yamak, M. 7079.
Yamakura, F. 6561.
Yamamoto, K. 3947.
Yamamoto, B.T. 4996.
Yamamoto, D.T. 1218.
Yamamoto, H. 1539, 1894, 1954, 3318, 3952, 6059.
Yamamoto, K. 2579, 2668, 2591, 5315, 8616.
Yamamoto, K.-I. 6215.
Yamamoto, M. 325.
Yamamoto, S. 6477.
Yamamoto, T. 3270, 4923.
Yamamoto, Y. 3327, 7456, 9223, 9906.
Yamane, H. 8628.
Yamamura, Y. 8327.

- Yoshiloshi, H. 6718.
Yoshimoto, A. 2623, 5538, 5539, 6517, 8918.
Yoshimura, A. 9364.
Yoshimura, H. 7316, 9180.
Yoshimura, K. 6503.
Yoshimura, T. 7456, 9223.
Yoshinaga, K. 1844.
Yoshizaki, H. 4621.
Yoshino, S. 1857.
Yoshino, Y. 847.
Yoshioka, H. 1981, 5552, 7417.
Yoshioka, K. 5436.
Yoshioka, T. 4399, 6215, 8918.
Yoshioka, Y. 4299, 7357, 7358, 7448, Zaslavskaya, P.L. 684, 8005.
Yoshizaki, T. 1592.
Yoshizawa, J. 3737.
Yoshizawa, T. 3884.
Yoshizumi, H. 1045.
Yotsuji, A. 735, 3305, 7144.
Yotsuans, J. 6751.
Young, B.R. 6731.
Young, C.R. 9969.
Young, D.H. 2779, 4077, 6461.
Young, D.J. 5002.
Young, H. 3565, 3728, 5407.
Young, J.R. 367.
Young, K. 3831.
Young, K.A. 7581.
Young, L.D. 330, 2848.
Young, N.R. 5953.
Young, P.W. 3955.
Young, R.J. 9495.
Young, S.Y. 1041, 5547, 6595, 7484.
Young, T.W.K. 1177.
Youngs, N.M.T. 4325.
Yourassowsky, E. 840, 2553, 6055, 7054, 7154.
Yousif, J.E. 7102.
Yousef, A.E. 9290.
Yousri, R.M. 4769.
Yousef, B.A. 3145, 8706.
Yousef, M.S.K. 4293.
Yousen, A.A. 1035.
Yousuf, M. 7059.
Yu, C.L. 672.
Yu, E.K.C. 2018, 3739, 8370.
Yu, N.-X. 6574.
Yu, P.K.W. 2530, 7129.
Yu, R.S.T. 4493.
Yu, V.L. 754.
Yu, X.-C. 822.
Yu, Z.-L. 9326.
Yuda, Y. 2586.
Yuzba, O.D. 4375.
Yuen, J.E. 402, 3126, 5837.
Yugari, Y. 7452.
Yuku, M. 9863.
Yulug, N. 7932.
Yung, S. 93.
Yungbluth, M. 912.
Yusafvalikite, D. Yu. 7339.
Yustratova, L.S. 8120.
Yusufu, H.I. 2925.
Zadhot, K.-J. 5416.
Zabel, P. 60.
Zabkiewicz, J.A. 4143.
Zabransky, R.J. 9743.
Zabza, A. 8435.
Zachry, G.S. 68.
Zackinnson, G. 7133.
Zadik, P.M. 3590.
Zadoks, J.C. 9368.
Zadrazil, F. 1999.
Zaehner, H. 1865, 7174, 8342, 8907.
Zagornaya, N.B. 9811.
Zagory, D. 8527.
Zahana, C.N. 8108.
Zahar, V. 8733.
Zaher, M.R. 702.
Zahra, M.K. 5896, 5897, 6348.
Zahrnan, A.S. 3823.
Zaikina, A.I. 2390, 2725.
Zaquin, L. 9053.
Zaic, J.E. 124, 4736, 5142, 8115.
Zak, A.F. 1629.
Zak, J.C. 1480, 4203, 9542.
Zak, O. 6129, 8823.
Zakal'sky, A.E. 7351.
Zakharashvili, T.N. 9375.
Zakelj, M. 3773.
Zakharchuk, R.V. 2616.
Zakharova, S. 1544.
Zakharova, G.M. 6154.
Zakharova, I.Ya. 951, 2083.
Zak, D. 5465, 5632.
Zakordonets, L.A. 1841, 1922.
Zakordonets, O.A. 8062.
Zakatskikh, A.F. 1753.
Zakin, H. 5488.
Zal, R.R. 263, 4809, 6685, 8458.
Zalunin, I. 4911.
Zamborlini, L.C. 8053.

- Zamini, I. 8026.
Zamota, B. 5564, 6314.
Zamos, B.L. 8920.
Zanca, D.M. 8002.
Zann, G.J. 1733.
Zanon, U. 9821.
Zapata, F. 5131, 9611.
Zaphyr, M.K. 754.
Zapromyotova, O.M. 1864.
Zar, F.A. 7031.
Zarun, F. 1611.
Zaritsky, A. 8215.
Zartanian, M. 9842.
Zartanian, M.V. 9967.
Zauner, E. 5502.
Zavadova, M. 8811.
Zavalnyuk, A.K. 9665.
Zavarzin, G.A. 8661.
Zavale, O. 7950.
Zavoruev, V.V. 8372.
Zavoruyev, V.V. 891.
Zavrelava, M. 3834.
Zawadzki, B.C. 2857.
Zayaitz, A.K. 266.
Zayed, S.M.A.D. 8446.
Zboni, M. 3803.
Zdrazelek, J. 3460, 3470.
Zechman, J.M. 2353.
Zeeck, A. 1665, 7174, 8342, 8907.
Zeelle, J.J. 4319.
Zeevaart, J.A.D. 5558.
Zehnder, A.J.B. 4748.
Zehnder, H.J. 4838.
Zehr, E.I. 1405.
Zeders, K.E. 1174, 3101, 6868.
Ziegler, R.S. 4979.
Zeikus, J. 6336.
Zeikus, J.G. 3260, 3664, 4660.
Zelante, F. 7190.
Zelazny, B. 989, 1208.
Zelery, K. 1601.
Zelepukha, S.I. 1584.
Zeleznik, D. 9951.
Zelinskaya-Tkachenko, A.F. 1991.
Zelles, L. 592.
Zeltyn, R.P. 7418.
Zemcov, S.J.V. 4357, 6155.
Zemelman, R. 9673.
Zendem, Z. 3705.
Zenin, C.T. 6455.
Zentmyer, G.A. 2147.
Zenal, A. 9695.
Zenvogianes, D. 8080.
Zetelak-Horvath, K. 1924.
Zettler, F.W. 3012, 3075, 9420, 9421, 9424.
Zevenhuizen, L.P.T.M. 9193.
Zeyen, R.J. 6775.
Zeyer, J. 5581.
Zeula, V. 8658.
Zgoda, W. 8917.
Zhan, M.-Y. 4469.
Zhang, L. 7225.
Zhang, Q. 8296.
Zhang, Q.F. 9340.
Zhang, X. 5357.
Zhang, Y.-W. 4483.
Zhao, M.-Y. 825, 9016.
Zhao, Z.G. 823.
Zhdanov, V.G. 6172, 6173.
Zhdanovich, Yu.V. 1670.
Zheldakova, R.A. 2701.
Zheifonova, V.P. 7468.
Zhenhaus, J. 7901.
Zhenodanova, S.M. 8284.
Zherebchuk, L.K. 2187.
Zherebilo, O.E. 2239.
Zherebko, V.M. 7862.
Zherebtsov, N.A. 5520, 7330.
Zhifang, M. 7901.
Zhil'skaya, Zh.Ya. 7586.
Zhiznevskaya, G.Ya. 7004.
Zhmurko, L.I. 1386, 9483.
Zhou, J.-Y. 9016.
Zhou, S.-P. 5357.
Zhu, X.S. 9340.
Zhu, Z.T. 9877.
Zhuang, H. 3524.
Zhukova, I.G. 7348.
Zhukova, R.A. 8805.
Zhukovskaya, S.A. 7148, 8860.
Zhuraviev, Yu.N. 6885.
Zhvantskaya, M.I. 3456.
Zia, T. 3562.
Zibilske, L.M. 5988.
Zickert, I. 3502, 8076.
Zickrick, K. 3809.
Ziechmann, W. 590.
Ziegler, M. 8974.
Zielke, R. 5752.
Ziesche, K. 3302.
Ziffer, J. 8395, 8414.
Zigheibolm, S. 5998.
Zikmanis, P.B. 1839.

- Zilberstein, Y. 6968.
Zillig, W. 7334.
Zilinska, Z. 9680.
Ziliken, F. 4682.
Zimmska, Z. 9680.
Zimmerman, S.B. 3436.
Zimmerman, S.E. 9013.
Zimmermann, G. 986.
Zimmermann, M.H. 8640.
Zinchenko, O.N. 1920.
Zindukova, V. 2186.
Zink, D.L. 2048.
Zink, R.T. 1251.
Zinkernagel, V. 2193.
Zinner, S.H. 6093.
Ziomek, E. 2659, 4666.
Zito, R. 4614.
Zitter, T.A. 1311.
Ziv, O. 4071.
Zizka, Z. 1832.
Zlotnikov, K.M. 2410, 7875.
Zmarkicki, S. 8459.
Zobawa, M. 7289.
Zobel, R.W. 5962.
Zobeley, S. 2954.
Zocher, R. 6206.
Zoeller, L. 4491.
Zoepel, P. 3356.
Zoetmeyer, R.J. 5308.
Zohar, M. 9378.
Zolotareva, B.N. 2334.
Zon, G. 7438.
Zona, C. 2952.
Zopf, D.A. 8335.
Zorawski, C. 1792, 2438.
Zorin, M. 5116.
Zosim, Z. 7863.
Zouchova, Z. 7187, 8015.
Zsigo, M. 7204.
Zsindely, A. 78.
Zsuffa, L. 4170.
Zuber, M.S. 1346, 3880, 8509, 9291.
Zuberi, R. 2911.
Zubkov, V.A. 9199.
Zueva, N.N. 4579.
Zueva, V.S. 686, 7922.
Zumft, W.G. 916, 3687.
Zummo, N. 3016.
Zuniga, E.H. 4580.
Zuniga, V.T. 2393.
Zunino, H. 159, 1476, 9625.
Zunnundzhanov, A. 1983.
Zuravleff, J.J. 754.
Zusevics, J.A. 1491.
Zutra, D. 1307, 5036, 9574.
Zuyeva, L.D. 577, 2373, 8689, 8690.
Zvenigorodsky, V.I. 6172, 6173.
Zviagintsev, D.G. 6960.
Zviagintsev, D.G. 4226.
Zviagintsev, D.G. 3201, 4224.
Zviagintseva, N.P. 1055.
Zwingelberg, H. 5637.
Zykina, L.V. 8454.
Zywno, S.R. 2629.

Subject Index

- Abattoirs**,
beef, hot-boning, bacteria contamination, cold storage 244.
cattle, brucellosis, hygiene 8072.
cattle, salmonellosis, surveys, zoonoses, man 234
chickens, bacteria food contamination 2034.
chickens, food contamination, *Campylobacter fetus* subsp. jejuni 2925.
chickens, Salmonella contamination 4845.
industrial effluents effects on soil microorganisms, soils (loam) 2381.
Salmonella contamination, turkeys 2050.
- Abelmoschus esculentus**,
Fusarium oxysporum f.sp. vasinfectum wilt, disease resistance 7740.
leaf blight, *Colletotrichum dematium*, phytophthora 9412.
- Abienol**,
conversion, *Nocardia restricta*, (12Z)-14bda-12,14-dien-17 α -oic acid 6617.
conversion, pathways, bacteria 6616.
conversion, *Rhodococcus erythropolis*, plasmids association 8437.
- Abies balsamea**,
bacteria, wetwood 6923.
dieback, fungi infection, etiology 7784.
root rot, mortality, forests 5075.
- Abies alba**,
Cylindrocarpon destructans pathogenicity, relationships, biosynthesis, auxins, gibberellins like compounds 4174.
factors, regeneration, association, soil microorganisms, mycorrhizas 534.
leaf litter decomposition, role saprophytes 6906.
leaf litter, fungi decomposition 2301.
litter, biodegradation, *Collybia maculata*, *Collybia butyracea*, *Collybia distorta* 1442.
pathogenicity, Cylindrocarpon destructans, role cytokinins 5881.
root rot, Phytophthora, pathology, incidence 4150.
- Abies balsamea**,
decay, canker formation, *Phellinus pini* var. *pini*, *Phellinus pini* var. *cancriformans* 538.
decay fungi, factors affecting disease resistance 8648.
plantations, *Armillaria mellea* infection 7788.
- Abies concolor**,
canker, temperature effects on 4157.
decay, canker formation, *Phellinus pini* var. *pini*, *Phellinus pini* var. *cancriformans* 538.
ectomycorrhizas detection association, + *Pteridium aquilinum* undergrowth 4191.
host range, *Heterobasidium annosum* 4168.
incidence, *Echinodontium tinctorum*, infection, wounding 546.
wetwood, inhibition, *Heterobasidium annosum* 9517.
- Abies fraseri**,
root rot, *Phytophthora cinnamomi*, metalaxyl disease control 5867.
seedlings, bioassays, *Phytophthora cinnamomi*, soil 324.
soil temperature, inoculum, effects on, root rot, *Phytophthora cinnamomi* 5872.
- Abies lasiocarpa**,
Xerophyllum tenax, *Vaccinium scoparium*, habitat, relationship *Conarionum colosporoides*, blister rust, *Pinus contorta*, USA, Idaho 5862.
- Abies magnifica**,
dieback, *Cytospora abietis*, branches, *Arceuthobium abietinum* parasitism 5863.
- Abcesses**,
liver, cattle, *Fusobacterium necrophorum* isolates, antibiotic sensitivity testing 7121.
pigs carcasses, bacteria isolation, characterization 5619.
- Abietic acid**,
Cercospora rosicola, biosynthesis, inhibition, gibberellins biosynthesis inhibitors 3646.
effects on *Erysiphe graminis* f.sp. *hordei*, haustoria growth, *Hordeum vulgare* 9347.
production, *Cercospora rosicola*, factors affecting 2731.
production, *Cercospora rosicola*, *Narcissus* extracts effects on 2732.
- biosynthesis, *Cercospora rosicola*, cytokinins inhibition 5531.
- Abiesida corymbifera**,
disease control, factors affecting, barley storage 7724.
mycelia morphology, liquid culture, mixing, rheology 9069.
- Abiesida cylindrospora**,
cell walls, glucuronins, physicochemical properties 6578.
mycelia, lipomannanopeptides, mannoproteins, characterization 7295.
- Abiesida repens**,
chloroheptane-2-one conversion 3801.
- Absorption spectroscopy**,
cytochrome c folding kinetics, structure intermediates, *Saccharomyces cerevisiae* 4559.
molybdenum, tungsten containing formate dehydrogenase (NADP⁺) multiple forms, *Clostridium thermoaceticum* 8280.
urea induction tryptophan synthase α -subunit unfolding, *Escherichia coli* 4590.
- Acacia dealbata**,
forests, soil nitrogen mineralization 523.
- Acacia holosericea**,
stands, nutrient cycles association endomycorrhizas 535.
- Acacia longifolia**,
Australia, *Rhizobium* isolation, characterization 6990.
- Acacia pulchella**,
nitrogen fixation, fires, fertilizer applications, phosphorus effects on 517.
- Acantthomoeba polyphaga**,
grazing, effects on *Pseudomonas cepacia* nitrogen mineralization 614.
- Actinidia**,
antifungal activity, *Mycosphaerella citri* 9497.
- Actaria**,
role, disease transmission, canker, *Endothia parasitica*, *Castanea dentata*, USA, Virginia, USA, West Virginia 6925.
- Acaulospora**,
association, *Populus*, incidence, USA, Iowa 5851.
endomycorrhizas, spores abundance, rhizosphere, land reclamation, mines 9541.
Glycine max, soil temperature effects on 2332.
- Acaulospora laevis**,
identification, use, enzyme-linked immunosorbent assay 7273.
- Acer**,
Verticillium dahliae infection, temperature effects on growth 2321.
- Acer platanoides**,
leaves, viruses infection 2309.
- Acer pseudoplatanus**,
scoy bark, *Cryptosporium corticale*, virulence 6931.
- Acer pseudoplatanus**,
bark, necrosis, *Nectria coccinea*, *Diplodia acericina*, pathogenesis 5071.
biodegradation, *Nectria cinnabarina*, *Calosporella innesii*, *Eutypa acharii*, ecological distribution 4181.
leaves, viruses infection 2309.
seedlings, endomycorrhizas effects on growth 531.
- sap, interference biological control, bacteria, *Insecta* 2831.
- Acer rubrum**,
Cryptosporopsis canker, vector-borne diseases relationship *Oecanthus angustipennis* 9524.
leaf litter, decomposition, soil microorganisms, flooding, nutrient dynamics 4194.
Verticillium dahliae infection, stems, water potential, relationship, electrical properties 2311.
- Acer saccharum**,
stands, cellulolytic microorganisms, wood decomposition, spatial distribution, population levels, bacteria, fungi 6891.
- Acetaldehyde**,
biosynthesis, *Saccharomyces cerevisiae* immobilized cells, ethanol biosynthesis 131.
- Acetamide**,
Pseudomonas aeruginosa isolation, man, cystic fibrosis 9904.
- 4-O-(2-Acetamido-2-deoxy- β -D-glucopyranosyl)-D-ribitol**,
biosynthesis, *Staphylococcus aureus* 7434
- Acetamidol**,
conversion, *Aspergillus* 7561.
- Acetate kinase**,
purification, characterization, *Bacillus stearothermophilus* 6423.
purification, characterization, *Veillonella alcalescens* 8225.
- Acetic acid**,
Acetobacter aceti, fermentation, oxygen deficiency effects on 6371.
antifungal activity, wheat post-harvest decay 441.
antimicrobial activity, airborne microorganisms, fungi, synergism, ethanol + sodium chloride + essential oils 7115.
association, penitrem A, biosynthesis, N.M.R., *Penicillium crustosum* 6700.
Bacteria superlatents, enzymes assays 7234.
carbon sources, *Rhodospseudomonas capsulata*, hydrogen production 7469.
Clostridium acetobutylicum, effects on glucose fermentation 4726.
decomposition, soil microorganisms, N.M.R. 8664.
fermentation, *Acetobacter aceti* subsp. *aceti*, morphology, oxygen deficiency effects on 8197.
incorporation, *Aspergillus flavus* aflatoxin B1, association, biosynthesis 6692.
media (enrichment), bacteria 9880.
metabolism, 2-bromethanesulfonic acid, 2-chloroethanesulfonic acid, inhibition, methanogenesis, methanogenic bacteria 5136.
N.M.R., stigmatocystin, biosynthesis, *Aspergillus versicolor* 6699.
preservatives, antimicrobial activity 706.
production, *Clostridium*, new species 4572.
production, *Pachysolen tannophilus* mutants 2733.
reduction, coliforms contamination, *Saccharomyces cerevisiae* 4773.
role, antagonism, association, metronidazole antibacterial activity, *Trichomonas vaginalis* 7090.
substrates, *Rhodospseudomonas capsulata*, hydrogen production 8386.
- Acetic acid bacteria**,
cytoplasmic membranes, alcohol dehydrogenase (acceptor), purification, characterization 4647.
levane biosynthesis 1956.
- Acetivibrio cellulolyticus**,
cellulase, substrate specificity 2799.
cellulose hydrolysis 7545.
metabolism, growth, cellulose 5585.
- Acetoxycetyl-CoA synthetase**,
purification, characterization, *Zoogloea ramigera* 57.
- Acetobacter**,
monobactams, biosynthesis, association, sulfur, metabolism 5266.
ornithine decarboxylase, GTP sensitivity, spermine biosynthesis 8371.
- Acetobacter aceti**,
acetic acid fermentation, oxygen deficiency effects on 6371.
- Acetobacter aceti subsp. aceti**,
morphology, acetic acid fermentation, oxygen deficiency effects on 8197.
- Acetobacter aceti subsp. xylinum**,
cellulose gels, crystallinity 8328.
- Acetobacter acetigenum**,
cellulose biosynthesis, glycerol media 111.
- Acetobacter liquefaciens**,
endodeoxyribonuclease AlIII, purification, characterization, substrate specificity 7417.
- Acetobacter woodii**,
comparison, *Clostridium thermoaceticum*, carbon monoxide dehydrogenase, purification, characterization 8262.
- Acetobacter xylinum**,
cellulose biosynthesis 7473.
- Acteinol**,
Lactobacillus production, pyruvic acid effects on 4721.
reduction, *Klebsiella pneumoniae*, 2,3-butanediol biosynthesis 9232.
- Acetolactate decarboxylase**,
Enterobacter aerogenes, use, beer maturation 136.
- Actone**,
biosynthesis, *Clostridium acetobutylicum*, fermenters 119.
 \pm heat treatments, seed treatments, *Fusarium moniliforme* elimination, corn 5845.
production, *Clostridium acetobutylicum*, continuous culture 1037.
production, *Clostridium acetobutylicum*, continuous culture, batch culture, nitrogen limitations 8393.
production, *Clostridium acetobutylicum*, media (culture) effects on 2660.
production, *Clostridium beijerinckii*, *Clostridium aurantiobutylicum* 2845.
production, pH effects on, *Clostridium acetobutylicum* 5563.
- 1-Acetoxy-2,3-dichloropropane**,
hydrolysis, asymmetry, bacteria, yeasts, molds 158.

Subject Index

- 11-Acetoxyloisagatholactone**,
Spongia officinalis, antibacterial activity 8769.
- Acetyl CoA**,
biosynthesis, Methanobacterium thermoautotrophicum, carbon dioxide role 7414
- N-Acetyl cysteine**,
effects on carbenicillin, mezlocillin, antibacterial activity, Pseudomonas aeruginosa 5281
- Acetyl deoxyvalenol**,
biosynthesis, Fusarium graminearum, grains substrates 8511.
- N-Acetyl- α -hydroxy- β -oxotryptamine**,
Streptomyces ramulosus, biosynthesis 8342.
- N-Acetyl- β -oxotryptamine**,
Streptomyces ramulosus, biosynthesis 8342.
- Acetyl-CoA**,
assays, use alcohol acetyltransferase, yeasts 5436.
Escherichia coli, bioassays, aminoglycoside antibiotics purification 3415.
- Acetyl-CoA acetyltransferase**,
purification, characterization, selenomethione identification, Clostridium kluyveri 88.
- Acetyl-CoA carboxylase**,
biotin binding sites, peptide synthesis, interaction, magnesium, N.M.R.,
Escherichia coli 4632.
Candida lipolytica 8219.
purification, characterization, yeasts 8223.
- Acetyl-CoA synthetase**,
purification, characterization, Saccharomyces cerevisiae 8221.
- α -N-Acetyl-D-glucosaminidase**,
Lycopersicon esculentum, defense mechanisms, wilt, Verticillium albo-atrum 4077.
- β -N-Acetyl-D-glucosaminidase**,
Phyrum polyccephalum, isolation, characterization 3673.
- N-Acetyl-loline**,
Epichloe typhina, accumulation, Festuca arundinacea 7499.
- Acetylation**,
budrosin A, Streptomyces fradiae resistant mutant 5164.
primagine, Streptomyces rimosus, Streptomyces roseochromogenus 7458.
- Acetylation**,
effects on nitrification, autotrophic bacteria, heterotrophic bacteria 594.
levels, soil, relationship, measuring techniques, denitrifying bacteria activity 5669.
pressure effects on nitrification, soil 617.
- Acetylene reduction**,
Alnus rubra nodules, nitrogen-fixing bacteria, measuring techniques 1496.
Azospirillum brasilense, nitrogen sources effects on 7838.
Azospirillum brasilense, Pennisetum americanum 385.
Azospirillum, Enterobacter, Klebsiella, Pseudomonas, carbon sources, factors affecting 4244.
conversion factors, comparison, nitrogen fixation, soil, water content,
nitrogenase activity, effects on 7005.
measuring techniques, Glycine max, field trials 5962.
Medicago sativa, symbiosis, Rhizobium meliloti 2374.
nitrogen fixation, measuring techniques, soil, forests 7835.
nitrogen fixation, nitrogen-fixing bacteria, rhizosphere, Sorghum bicolor,
Pennisetum americanum 9612.
nitrogen fixation, seasonal variations, cultivars effects on, Glycine max 9581.
nitrogen-fixing bacteria activity, Gramineae 1497.
Rhizobium leguminosarum, relationship hydrogen gas production, nitrogen fixation,
soil sampling methodology effects on 7831.
Trifolium repens, nitrogen fixation, diurnal variations 609.
use, detection nitrogen fixation, soil microorganisms 2373.
- α -N-Acetylglucosaminyltransferase**,
Kluyveromyces lactis, purification, characterization 2756.
- N-Acetylpenicillin N**,
Streptomyces tokonensis sp. nov. biosynthesis 3410.
- 6-Acetylmethylene penicillanic acid**,
 β -lactamase inactivation, Escherichia coli 5248.
- 6-Acetylmethylene penicillanic acid**,
inactivation β -lactamase, mechanisms, Escherichia coli 6501.
 β -lactamase inhibition 2754.
 β -lactamase inhibitors, +ampicillin, piperacillin, ceftriaxone, antibacterial activity 3405.
- 2-Acetylpyridine**,
antitubercular agents, antibacterial activity 3310.
- 2-Acetylquinoline**,
+antitubercular agents, antibacterial activity 3310.
- D-Acetylsarine (thiol)-yase**,
purification, characterization, Candida lipolytica 6406.
- Achaeae janata**,
biological control, Bacillus thuringiensis endotoxins, pathogenicity 1038.
- Achaetoides**,
biosynthesis, Achaetomium cristalliferum, structure 5555.
- Achaetomium cristalliferum**,
achaetoides biosynthesis, structure 5555.
- Achatina fulica**,
mucin, antibacterial activity, Bacillus subtilis, Staphylococcus aureus,
Escherichia coli, Pseudomonas aeruginosa 5185.
- Acholeplasma**,
Incomymedia media (selective) 7233.
- Acholeplasma laidlawi**,
biosynthesis, ATP, AMP, ADP 9220.
uracil phosphoribosyltransferase, purification, characterization 9141.
uridine phosphorylase, purification, characterization 9142.
- Acholeplasma morum**,
biosynthesis, ATP, AMP, ADP 9220.
- Achotina fulica**,
vectors, Erwinia canker, Carica papaya, symptoms, Mariana Islands 1222.
- Achromobacter**,
bacteria growth, amino carbon 8069.
biodegradation, 6-aminohexanoic acid 3783.
clinical isolates, β -lactamase isolation, characterization 8228.
extracellular polymers, carbohydrate composition 1958.
methylcrotonyl-CoA carboxylase, purification, characterization 8233.
pathogenicity effects on, Beta vulgaris crop production 403.
- Achromobacter agile**,
corrosion, steel, role dissolved oxygen, sea water 9626.
- Achromobacter liquidum**,
tryptophan, production, growth conditions 8203.
- Achromobacter obae**,
 α -amino- ϵ -caprolactam racemase, purification, characterization 1890.
- Achyla**,
nickel toxicity 1565.
- Acid anilides**,
gram-negative bacteria biodegradation 2898.
- Acid phosphatase**,
biochemical characteristics, Saccharomyces cerevisiae 7428.
role alkaloids production, Claviceps 7492.
Ustilago esculenta extracellular enzymes, purification 4625.
- Acid production**,
dental caries, plaque index, sodium fluoride, mouthwashes, man 7210.
lactic acid bacteria, starter cultures, sourdough 5620.
Lactobacillus bulgaricus, Lactobacillus casei, γ radiation induction mutants,
milk 8200.
Rhizobium isolates, Cajanus cajan, Cicer arietinum 7821.
Streptococcus mutans, stannous fluoride effects on 8771.
Streptococcus thermophilus, starter cultures, water content, cheese 8462.
- Acid rain**,
 \pm cadmium \pm zinc, pollution effects, viability, soil microorganisms 9509.
effects on, Glomus gesporium, interaction, Glomus max 8674.
Glomus fasciculatus stimulation, heavy metals uptake, Ehrharta calycina 7805.
pollution effects, soil microorganisms, leaf litter decomposition, nutrient availability, sulfur 9507.
- Acid-base regulation**,
enzymatic activity, soil 3203.
- Acid-base status**,
antibiotics, aqueous ethanol solutions 5234.
nystatin, physicochemical properties 6177.
- Acidification**,
soil, inhibition Verticillium dahliae, root rot, Datura stramonium 6837.
- Acidity**,
fermentation, Theobroma cacao, methodology, effects on 3842.
+potassium sorbate, sodium benzoate, effects on heat inactivation, yeasts, fruit
juices 5636.
rainfall levels, effects on nutrient balance, soil microorganisms 9514.
soil chemistry, nitrogen fixation, agricultural land, Leguminosae 5956.
soil pH, effects on Trifolium repens, +Rhizobium trifolii symbiosis, measuring
techniques 4235.
- Acidophilic bacteria**,
contamination, Thiobacillus ferrooxidans cell culture, elimination methodology
9978.
- Acids**,
clinical isolates metabolism, levels, use, diagnosis, anaerobic bacteria
infection 894.
effects on plant debris biodegradation, microorganisms, lakes, polar environments
1995.
hydrolysis, Oryza sativa crop residues, production, single-cell protein, Candida
tropicalis 9106.
solubility proteins, electrophoresis, relationship, infection, viruses, fungi,
Lycopersicon esculentum 2983.
treatment, Aspergillus flavus-parasiticus infection, Avena, aflatoxins
biosynthesis 311.
waste water, digestion (anaerobic) 2603.
wastewater hydrolyses, ethanol fermentation, Saccharomyces cerevisiae 4734.
- Acinetobacter**,
antibacterial activity, β -lactam antibiotics 4340.
antibacterial activity, aztreonam 8881.
antibacterial activity, mezlocillin, penicillins, cephalosporins 9709.
antibacterial activity, O-demethylformicin 4413.
biofilm growth, association carbon 8069.
biodegradation, PCB 8429.
clinical isolates, antibacterial activity, ceftazidime, cefotaxime, moxalactam
4365.
emulsion binding uranium, kinetics 7863.
food contamination, ripening, salami 2030.
glutamin- (asparagin-)ase, crystallography 7399.
growth, pH, temperature, cooling water, paper mills 7201.
media (selective) 5393.
propylene glycol conversion, pyruvic acid production 3652.
waxes esters production 2841.
- Acinetobacter anitratus**,
cephalosporins + aminoglycoside antibiotics antibacterial activity 1607.
- Acinetobacter calcoaceticus**,
arginine, mutants, ornithine, production 6389.
burn infection isolates, antibiotic sensitivity testing 1597.
cell adhesion, biomass, monitoring, methodology, hexadecane, fermentation 5142.
citrate (s)-synthase, allosteric properties, dihydrois (succinimid) propionate)
cross-linking effects on 4676.
citrate (s)-synthase, allosteric properties, subtilisin proteolysis effects on
4677.
clinical isolates, antibacterial activity, cefoxitin, tobramycin, comparison
N-formimidoyl thienamycin 7076.
emulsion, bacteria mixed culture biodegradation 8424.
 β -lactamase inhibitors, cephalosporins synergism 6133.
lipopolysaccharides, lipid A, isolation, characterization 1779.
mandelate dehydrogenase expression regulation 8286.
penicillin-binding protein, binding clavulanic acid, sulbactam, effects on
antibacterial activity 7134.
polysaccharides, extracellular levels, association emulsification activity 1949.
streptomycin resistance markers, transformation, factors affecting 7895.
- Acinetobacter calcoaceticus subsp. anitratus**,
clinical isolates, β -lactam antibiotics, antibacterial activity 7979.
norfloxacin antibacterial activity 8760.
streptomycin antibiotic resistance markers transformation, taxonomic significance
7905.
- Acinetobacter calcoaceticus subsp. lowfi**,
clinical isolates, β -lactam antibiotics, antibacterial activity 7979.
- Acinetobacter calcoaceticus subsp. lowfi**,
streptomycin antibiotic resistance markers transformation, taxonomic significance
7905.
- Acinetobacter glutamiasifans**,
glutaminase asparaginase, kinetics, substrate specificity, mechanisms 6543.

- Actinomyces**,
characterization, reviews 769.
reduction, NADH dehydrogenase catalysis, *Vibrio harveyi* 4633.
role, DNA biosynthesis inhibition, phage Φ X174 9775.
- Actinomyces**,
purification, characterization, *Streptomyces* 8017.
- Actinomyces**,
clinical isolates, *Propionibacterium*, antibiotic resistance 8736.
- Actinomyces calomus**,
essential oils, antimicrobial activity 2495.
- Actinomyces**,
structure, *Polysphondylium violaceum* 7294.
- Actinomyces**,
incidence, drinking water systems 1722.
invasion, *Trifolium repens* 5692.
- Actinomyces chrysogenum**,
cephalosporin C, proteinase, biosynthesis, nitrogen sources, carbon sources
effects on 6140.
- Actinomyces**,
cephalosporin C, relationship, proteolytic enzymes, biosynthesis, growth
conditions, effects on 4375.
use, antibiotics production, reviews 5238.
- Actinomyces coenophialum**,
detection methodology, infection, *Festuca arundinacea* seeds 9077.
- Actinomyces crotoclinum**,
use, detection, microorganisms, children blood culture 8140.
- Actinomyces diospyri**,
extracellular glucans biosynthesis, characterization 5533.
- Actinomyces roseum**,
1-(2,2,3-trimethylcyclopent-3-en-yl)propan-2-one conversion 8435.
- Actinomyces orange**,
effects on polyglutamic acid biosynthesis, *Bacillus subtilis* plasmids 1846.
use, detection, microorganisms, children blood culture 8140.
- Actinomyces epoxide**,
biosynthesis, *Ruta graveolens* callus + fungi mixed culture 7266.
- Actinomyces**,
antibacterial activity, *Neisseria gonorrhoeae* 8754.
- Actinomyces**,
Pseudomonas chlorophaxis, biosynthesis, aliphatic nitrile hydratase 1982.
- Actinomyces bacillus**,
recovery, animals, pleural fluid, synovial fluid, media methodology 3609.
- Actinomyces**,
structure 1641.
- Actinomyces**,
nystomycin, amino acid sequence 7165.
- Actinomyces**,
antibiotic sensitivity testing 6109.
distribution, soils (podzolic), USSR 1492.
ecological distribution, soil, antibiotics, antagonism gram-positive bacteria
1487.
incidence, soil, USSR 5923.
- Actinomyces**,
actinomycin C variants, physicochemical properties 6237.
antitumor antibiotics, biosynthesis, structure 5543.
biosynthesis, benz(a)anthracene metabolites 2822.
biosynthesis texazone, structure 8337.
biphenyls, structure-function relationship, antimicrobial activity, dental
plaque 5222.
N-formyl-13-dihydrocarminomycin biosynthesis, isolation, structure 5542.
oral cavity isolates, antibacterial activity, metronidazole + spiramycin tablets
1004.
periodontal diseases isolates, antibiotic sensitivity testing 3376.
phytochrome distribution, growth stage, *Vicia faba*, Glycine max, effects on
666.
Rhizobium japonicum antagonists 576.
variants, susceptibility, actinomycin, factors affecting 3326.
- Actinomyces bovis**,
clinical isolates, ketoconazole sensitivity 5183.
- Actinomyces canulius**,
antibiotics biosynthesis, characterization, comparison, antibiotic CC-1065 780.
- Actinomyces laevis**,
clinical isolates, ketoconazole sensitivity 5183.
- Actinomyces lavendulae**,
cholesterol oxidase, purification, characterization, ion-exchange chromatography
6554.
- Actinomyces nasallundii**,
antibacterial activity, *Streptococcus mutans* bacteriocins 8025.
clinical isolates, ketoconazole sensitivity 5183.
dental plaque isolates, octenidine dihydrochloride antibacterial activity 3325.
- Actinomyces viscosus**,
antibacterial activity, *Streptococcus mutans* bacteriocins 8025.
bone resorption, factors, relationship, antigens, characterization 3711.
clinical isolates, ketoconazole sensitivity 5183.
dental plaque isolates, octenidine dihydrochloride antibacterial activity 3325.
oral cavity isolates, xylitol bacteriostasis 8782.
polysaccharides, biochemical characteristics 2817.
recovery, animals, pleural fluid, synovial fluid, media methodology 3609.
- Actinomyces**,
clinical isolates, ketoconazole sensitivity 5183.
- Actinomyces**,
acylase biosynthesis, substrate specificity 975.
antagonists, use, disease control, *Lycopersicon esculentum*, *Citrus vulgaris*,
Fusarium wilt 1354.
antibiotics biosynthesis, role nuclease, proteinase, α -amylase 7123.
asymmetry hydrolysis, 1-acetoxy-2,3-dichloropropane 158.
contamination, cigarettes, *Cannabis sativa* 8172.
detection, antitumor antibiotics, screening methodology 2581.
ferroamine H, structure 8387.
gold, biogeochemistry 7013.
humus complex phosphate, nutrient availability, fertilization, agricultural land
9625.
isolation, *Alnus* nodules, rhizosphere, antibiotic sensitivity testing 664.
levorin biosynthesis, relationship, *Candida tropicalis* culture extracts 6233.
metabolites, production, media (selective) 4706.
modulation, soil pH, phosphorus effects on, *Alnus glutinosa* 555.
proteolytic enzymes biosynthesis 8293.
protoplasts, membrane fusion, recombination, technology 5422.
- Actinomyces**, (continued)
rhizosphere microorganisms, *Nicotiana rustica* age effects on 7795.
screening, antitumor antibiotics, purification, characterization, antitumor
activity 2825.
sewage sludge composts, distribution, thermophilic bacteria 5312.
soil isolates, collagen hydrolysis, factor affecting 7562.
soil microorganisms, antibiotics biosynthesis, screening, micromethods,
radioactive labelling tracers 9882.
soil microorganisms association Glycine max, propachlor effects on 7862.
soil microorganisms, population levels, slash and burn 9622.
storage, antibiotics sensitivity, morphology 7070.
- Actinomyces**,
susceptibility, *Actinomyces*, variants, factors affecting 3326.
- Actinomyces C**,
variants, physicochemical properties, *Actinomyces* 6237.
- Actinomyces D**,
antiviral activity, effects on protein composition, tobacco mosaic virus,
infection, *Phaseolus vulgaris* 6888.
effects on, tobacco mosaic virus, tobacco ringspot virus, tobacco rattle virus,
potato leaf roll virus, infection, *Nicotiana tabacum*, protoplasts 7701.
resistance, polyoma virus infected cells, RNA transcription 3308.
- Actinomyces IV**,
action, characterization, *Streptomyces elizabethii* 4420.
- Actinomyces V**,
isolation, characterization, *Streptomyces elizabethii* 4420.
- Actinoplanes awajinensis subsp. mycoplanecinus**,
mycoplanecins A, structure 9766.
mycoplanecins, isolation, physicochemical properties 9790.
new taxa, biosynthesis, mycoplanecins, taxonomy 9789.
- Actinoplanes philippinensis**,
biosynthesis, isohexametic acid 8902.
isohexametic acid, physico chemical properties, antibacterial activity 8903.
- Actinorrhiza**,
Frankia, - *Gliomus mosseae*, effects on nitrogen fixation, *Casuarina*
equisetifolia 3215.
Frankia alni, nitrogen fixation, *Alnus rubra* 5958.
Frankia, *Alnus glutinosa* nodulation, growth 5967.
nodulation, nitrogen fixation, *Alnus rubra*, interaction *Populus*, biomass, mixed
culture, silviculture 3512.
- Actinosporangium bohemicum sp. nov.**,
marcellomycin biosynthesis, antitumor activity 983.
- Actinosynema mirum**,
nocardicin biosynthesis 6200.
- Activated carbon**,
filters, bacteria growth, organic compounds decomposition, wastewater treatment
8956.
microorganisms, removal, organic compounds, water 6255.
Vaccinium, effects on mycorrhizas formation 6970.
- Activated sludge**,
aerobic bacteria, respiration measurements 6254.
bacteria activity, relationship, sewage mercury concentration 8943.
bacteria, extracellular polymers, heavy metals adsorption 1689.
bacteria, films, separation, ultrasound, counting methods 8933.
bacteria, heavy metals tolerance, copper bioaccumulation, wastewater treatment
6248.
bacteria, inactivation, viruses 791.
bacteria, population levels, cell numbers, viability, population ecology 4440.
bacteria, population levels, population ecology 4439.
biodegradation, hydroquinone 8427.
carbon sources metabolism, mathematical models 5303.
denitrification kinetics, carbon source 5298.
extracellular polymers, bacteria, heavy metals adsorption 1690.
factors affecting thickness 5304.
feeding patterns, relationship, filamentous bacteria development, association,
wastewater treatment 3476.
ferric chloride effects on 4441.
filamentous microorganisms incidence 8974.
flocculation, relationship, ATP levels 8799.
heavy metals accumulation 5296.
incubation, standardization, biochemical oxygen demand determination, organic
chemicals 9802.
lysis bacteria isolation, role decontamination, USSR 8062.
mathematical models 1700.
microorganisms, oxygen uptake measurement methodology 5359.
mutualism, *Cytophaga*, *Zoogloea* 3463.
nitrification systems, growth suspensions 4433.
nitritotriacetic acid, biodegradation, water hardness, effects on 2612.
nitritotriacetic acid, biodegradation, water hardness effects on 2611.
olive oil, degradation kinetics 8056.
oxidation, nitrification, growth kinetics 5299.
oxidation, sedimentation, effects on waste treatment 1703.
protein production, breweries, industrial effluents 8932.
pyrolysis 4449.
quantification, wastewater treatment 6256.
relationship, microorganisms feeding patterns effects on glucose metabolism 6247.
removal, *Salmonella enteritidis* 5314.
sewage treatment, microorganisms distribution, microorganisms, distribution,
activated sludge, sewage treatment 787.
sewage treatment, microorganisms distribution, models 8948.
sewage treatment, models 8949.
solid wastes, digestion (aerobic) 1691.
solid wastes, methanogenesis, digestion (anaerobic) 1692.
sonication effects on particles size 1702.
steel industries, wastewater treatment 5306.
temperature effects on 7198.
treatment, chemicals wastes, bioreactors 9804.
wastewater treatment 5307.
wastewater treatment, aeration tanks activity 8965.
wastewater treatment, aeration tanks, oxygenation effects on 799.
wastewater treatment, pesticides effects on 6240.
wastewater treatment, sampling methodology, viruses detection 6251.

Subject Index

- Aculeacin A**,
fungi, drug sensitivity testing 4308.
- Acylase**,
Actinomycetes, biosynthesis, substrate specificity 975.
- Acyl carrier protein**,
Escherichia coli, purification, immunoabsorption chromatography 8193.
- Acyl-(acyl-carrier-protein) synthetase**,
purification, characterization, Escherichia coli 8246.
- Acyl-CoA carboxylase**,
Mycobacterium tuberculosis, Mycobacterium bovis, purification, characterization 96.
- Acyl-CoA oxidase**,
purification, characterization, Candida tropicalis 7427.
- Acyl-CoA synthetase**,
isoenzymes, purification, characterization, Candida lipolytica 8222.
Rhodospseudomonas palustris, isoenzymes 6519.
- 3-Acyl-4-hydroxy-6-methyl-2H-thiopyran-2-ones**,
derivatives, bromination, antibacterial activity, antifungal activity,
Staphylococcus aureus. Canrlria albicans 2493.
- derivatives, bromination, antibacterial activity, antifungal activity,
Staphylococcus aureus, Candida albicans 2493.
- Acylalmines**,
resistance, Phytophthora infestans, New Zealand 7880.
- N-Acylaminosulfonates**,
glycine bacteria, purification methodology 4509.
- Acylureidopenicillins**,
antibiotic antagonism, cephalosporins, antibacterial activity, in vitro 6144.
- Acyrthosiphon pisum**,
disease transmission, pea enation mosaic virus, bean yellow mosaic virus, Pisum sativum 2101.
pea enation mosaic virus acquisition, infectivity, transmission 2107.
pea streak virus transmission, Medicago sativa, Pisum sativum 3908.
potato leaf roll virus, disease transmission, feeding behavior, permethrin, deltamethrin effects on 8526.
vectors, disease transmission, pea enation mosaic virus, Lathyrus odoratus 342.
vectors, disease transmission, potato virus Y, plant disease 9400.
- Adamanine**,
derivatives, antiviral activity, influenza A virus, tissue culture 7949.
- Addicta**,
isolate, Staphylococcus aureus, methicillin resistance, susceptibility strains,
antibiotic sensitivity testing 3393.
- Adelges**,
association, mycorrhizas, soil pH effects on, Borenia reticulata 1472.
grazing, fungi, association Larix defoliation 540.
- Adenine**,
biodegradation, soil 5890.
dimethylation, Streptomyces erythraeus, association erythromycin antibiotic resistance 638.
metabolism, Brevistibacterium ammoniagenes, ATP biosynthesis 7494.
nutrient requirements, Rhizobium meliloti, auxotrophy mutants, nodulation, Medicago sativa 9616.
stimulation endonuclease, extracellular enzymes, Staphylococcus aureus 7329.
trostin A binding 8030.
- Adenine arabinoside**,
antiviral activity 6063.
production, Enterobacter aerogenes, immobilized cells 961.
- Adenosine**,
derivatives, effects on rhabdovirus replication 6068.
phosphorylation ratio, soil microorganisms 4220.
- Adenosine arabinoside**,
drug sensitivity testing assays, herpes simplex virus 1, herpes simplex virus 2 6075.
- Adenosine nucleotides**,
inhibition 4-hydroxybenzoate 3-monoxygenase, Pseudomonas fluorescens 8275.
- Adenosine (phosphate) deaminase**,
Bacillus cereus, substrate specificity 1934.
- Adenosine phosphorylase**,
Bacillus cereus, substrate specificity 1934.
- Adenosinetriphosphatase**,
activity, correlation, drug resistance, Schizosaccharomyces pombe 8748.
amino acid sequence, Streptococcus faecalis 1911.
antibiotic MF722-02 inhibition 3422.
bacteria, bioluminescence assays, blood culture, use, bacteremia diagnosis 8125.
DNA dependent, purification, characterization, Bacillus cereus 8264.
hydrodynamics, fluorimetry, thermophilic bacteria 1879.
mitochondria, Tolypocladium inflatum elavapeptin inhibition 5.
N,N'-dicyclohexylcarbodiimide binding substrates, purification, characterization, cell membranes, Bacillus subtilis 2833.
purification, characterization, Rhodospseudomonas palustris, Rhodospseudomonas sphaeroides 9170.
purification, characterization, vacuoles, Saccharomyces carlsbergensis 45.
sialization proteins, amino acid sequence, mitochondria, yeasts 8274.
5'-subunit, phosphate binding sites, 4-azido-2-nitrophenylphosphate
photoaffinity labeling, Escherichia coli 4687.
- S-Adenosylhomocysteine**,
analogs, effects on, RNA biosynthesis, mRNA, methylation, vaccinia virus 3349.
- Adenovirus**,
antigens, detection, immune adherence hemagglutination 9846.
antiviral activity, quaternary ammonium compounds 1571.
contamination, crops, leaves, recovery methodology 1767.
DNA, preparation methodology, infected cells 9017.
tissue culture, immunofluorescence staining methodology 9845.
- Adenovirus (canine)**,
antiviral activity, food wastes fermentation, Lactobacillus acidophilus,
Saccharomyces cerevisiae 7596.
canine distemper virus, parvovirus (canine), parainfluenza virus, Leptospira,
bacteria, vaccines, immunogenicity, dogs 8924.
combined vaccines, antibody response, dogs 3449.
- Adenovirus (human) 17**,
antiviral activity, 2-amino-5-(2-N-methyl-sulfamidophenyl)-1,3,4-thiadiazole,
derivatives 9693.
- Adenovirus (human) 17, (continued)**
synthetic compounds antiviral activity 8064.
- Adenovirus (human) 5**,
5-amino-2-(dimethylaminoethyl)-benzo[de]-isoquinolin-1,3-dione antiviral activity 3358.
antibody response, detection, enzyme-linked immunosorbent assay, man 3544.
plaque assay 5372.
rbavirin, antiviral activity 7948.
- Adenylate cyclase**,
activation, eukaryotes, association, Escherichia coli enterotoxins, biosynthesis, plasmids role 7642.
calmodulin activation, Bordetella pertussis 7349.
characterization, Saccharomyces cerevisiae plasma membranes 932.
Escherichia coli, deletion mutant, transduction methodology 5401.
- Adenylylation**,
glutamine synthetase, Chlorobium vibrioforme 7319.
- Adhesives**,
Rhizobium meliloti seed treatments, inoculation, Medicago sativa 8681.
- Adineta**,
predation, Cephalophora navicularis sp.nov., soil 9545.
- Adiposin**,
antibacterial activity, antifungal activity, oligosaccharides inhibition 2569.
inhibition, physicochemical properties, Streptomyces calvus 5277.
Streptomyces calvus, biosynthesis 2568.
- Adiposin-1**,
Streptomyces calvus, synthesis 7282.
- Adjuvants**,
sprays, biological control, pathogens, nuclear polyhedrosis virus, Heliothis zea 5547.
- Adonitol**,
protection, lactic acid bacteria, freeze-drying 2686.
- Adoxophyes orana**,
biological control, nuclear polyhedrosis virus, association granulosis virus effects on Cydia pomonella 8354.
larvae, biological control, nuclear polyhedrosis virus 8358.
- ADP**,
binding pyruvate kinase, Neurospora crassa 1931.
biosynthesis, Mycoplasmales 9220.
inhibition, lactate dehydrogenase, Phycomyces blakesleeana 1905.
- ADPGlucose synthetase**,
Rhodospseudomonas sphaeroides, purification, characterization 93.
- β -Adrenergic blocking agents**,
effects on turbidity, Escherichia coli cell suspensions 2442.
- Adriamycin**,
antibacterial activity, structure-activity relationships, Bacillus subtilis, Escherichia coli, Proteus mirabilis 4404.
antitumor activity, antimicrobial activity, ascorbic acid, dimethyl sulfoxide, effects on 8033.
- Aecidium osteospermii**,
infection, Chrysanthemoides monilifera subsp.monilifera, pathogenesis 427.
- Aeciosporium**,
inoculum, Cronartium quercuum f.sp.fusiforme, rust, etiology, Quercus 2322.
inoculum, Cronartium quercuum f.sp.fusiforme rust, Quercus seedlings 544.
- Aedes aegypti**,
Bacillus thuringiensis, Bacillus thuringiensis subsp.israelensis spores, toxicity 4713.
biological control, larvae, factors affecting, Bacillus thuringiensis 8380.
cell culture, isolation, identification, yellow fever virus 9835.
geographical variations, susceptibility, endotoxins, Bacillus thuringiensis, India 293.
larvae, Bacillus thuringiensis subsp.israelensis treatment pathogenesis 3721.
larvae, biological control activity, Bacillus thuringiensis, Bacillus sphaericus cell culture 7486.
larvae, biological control activity, Bacillus thuringiensis, Bacillus sphaericus cell culture 8349.
larvae, biological control, Bacillus sphaericus 6611.
larvae, biological control, Bacillus thuringiensis crystals, potassium carbonate effects on 4717.
larvae, biological control, histopathology, δ -endotoxin, Bacillus thuringiensis 1019.
pest control, pathogenicity, environmental effects, Bacillus thuringiensis 295.
- Aedes albopictus**,
geographical variations, susceptibility, endotoxins, Bacillus thuringiensis, India 293.
larvae, biological control, Bacillus sphaericus 6611.
- Aedes caspius**,
larvae, biological control, Bacillus sphaericus 6611.
- Aedes taeniorhynchus**,
biological control, Bacillus thuringiensis, salt marshes 7461.
biological control, Culicoides clavosporus, Lagenidium giganteum 2834.
- Aegle marmelos**,
essential oils, antifungal activity, Fusarium lateritium f.sp.cajani 6062.
- Aeration**,
air filtration, sterility, fermentation 7119.
bioreactors, Hansenula polymorpha, Escherichia coli, reviews 8084.
composting, sewage sludge 8937.
effects on Aspergillus niger, citric acid biosynthesis 3644.
fermenters, Streptomyces aureofaciens, tetracycline biosynthesis 8870.
induction phages lysis, Bacillus thuringiensis subsp.thuringiensis, culture 6314.
Streptomyces rimosus, oxytetracycline production 4392.
yeasts, fermenters 7519.
- Aeration tanks**,
activity, wastewater treatment activated sludge 8965.
wastewater treatment, oxygen absorption 4437.
wastewater treatment, oxygenation effects on activated sludge 789.
- Aerial applications**,
Bacillus thuringiensis, role, interaction, Apanteles melanoscelus, Lymantria dispar 3722.
chlorothalonil, disease control, Phaeocryptopus gaumannii needlecast, Pseudotsuga menziesii, USA, Washington 6879.
- Aerial photography**,
I.R. radiation, Solanum tuberosum blight detection 1252.
identification, barley yellow dwarf virus, Aphididae, infection, Triticum aestivum 6762.
- Aerobacter aerogenes**,
cell culture, Corydalis sempervirens tissue culture, glyphosate resistance 8743.

Aerobacter aerogenes, (continued)

- exo-maltose hydrolase, immobilization, radiation methodology 9177.
- Aerobic bacteria.**
- activated sludge, respiration measurements 6254.
- antibacterial activity, cefotetan, cefotaxime comparison 4348.
- cefotaxime, moxalactam, antibacterial activity comparison, antimicrobial agents 6126.
- drinking water isolates, antibiotic resistance, streptomycin 1533.
- fouling organisms, antibacterial activity, antifouling substances, metals, sea water 151.
- lactic acid biosynthesis 8206.
- levels, Fagus forests soil horizons, seasonal variations 524.
- media (culture), counting methods, apparatus 7213.
- meclocillin antibacterial activity 6149.
- niridazole antibacterial activity, anaerobic bacteria, niridazole antibacterial activity 3328.
- pigs wastes biodegradation, heat output 2888.
- population dynamics, waste treatment, animal wastes, lagoons 4434.
- sepsis isolates, antibiotics resistance 8729.
- swabs transport methodology 2685.
- temperature effects on antibacterial activity, antibiotics 1603.
- Aerobic conditions.**
- Aeromonas salmonicida, pigments analysis 8392.
- aromatics amines, biodegradation 8436.
- Campylobacter tolerance, media (culture) 5400.
- comparison, anaerobic conditions, bacteria, culture tanks 9883.
- hydrogen oxidation, hydrogenase, soil 5917.
- isolation, bacteria, subculture, blood culture 9924.
- microenvironments, media (isolation), Campylobacter, methodology 9979.
- microorganisms growth, products yields 9103.
- purines biodegradation, Enterobacter cloacae 3794.
- soil microorganisms, urea hydrolysis 5109.
- Streptococcus group A isolation 9962.
- wastewater treatment, models 788.

Aerobic digestion, sewage sludge, nitrification, denitrification 5302.

- Aeromonas.**
- bacteria growth, association carbon 8069.
- clinical isolates, antibacterial activity, ceftazidime, cefotaxime, moxalactam 4365.
- R factors, animal isolates, Pisces 3275.
- feces isolation, media (culture) 9896.
- food contamination, ripening, salami 2030.

Aeromonas hydrophila, antibacterial activity, ciprofloxacin 9661.

- antibiotic sensitivity testing, Autocob test 9731.
- N-formimidoyl thienamycin, cefoxitin, antagonism cephalosporins, β -lactamase induction 7059.
- indicator species, association, drinking water, waste water, water sources 797.
- isolation, sewage sludge 6248.
- lactic acid biosynthesis 8206.
- lipopolysaccharides, carbohydrate composition, structure 6577.
- nalidixic acid antibacterial activity, comparison, Enterobacteriaceae 9673.
- proteinase, extracellular enzymes, purification, characterization 2764.
- proteinase production, culture systems effects on 2805.

Aeromonas hydrophila subsp. proteolytica, aminopeptidase, active sites, characterization 8255.

- Aeromonas phenologenes,**
- electrodes, use tyrosine measurements 6303.

Aeromonas proteolytica, aminopeptidase, active sites characterization, chemical modification 956.

- Aeromonas proteolytica subsp. proteolytica,**
- aminopeptidase, nickel(II), copper(II), substitution effects on activity 8277.

Aeromonas salmonicida, antibacterial activity, oxolinic acid 8763.

- cell surface membrane proteins, purification, physicochemical properties 7290.
- extracellular enzymes, proteinase, purification 9171.
- glycerophospholipid-cholesterol acyltransferase, substrate specificity 1884.
- pigments analysis, aerobic conditions 8392.
- proteinase, isolation, purification, characterization 6530.

Aeromonas salmonicida subsp. salmonicida, biochemical characteristics, novobiocin drug resistance, temperature effects on 5167.

- Aeromonas sobria,**
- biochemical characteristics, isolation, drinking water, chlorination 6262.

Aerocoles.

- Bacillus globigii spores, inactivation, microwave radiation 9706.
- bacteria, characterization, factors affecting viability, reviews 8115.
- coliforms, Cyanophyta phages, wastewater treatment, indicator species 9796.
- disinfectants, airborne microorganisms 5346.
- disinfectants, sanitation, nosocomial environments 806.
- Escherichia coli, dispersion, screening, methodology 7237.
- vaccines, Newcastle disease, antibody response, chickens 7188.

Aeschynanthus marmoratus, Corynespora casicola leafspot 2192.

- Aeschynanthus pulcher,**
- Corynespora casicola leafspot 2192.

Aeschynanthus pulcher, Corynespora casicola leafspot 2192.

- leafspot, Myrothecium roudum 5747.

Aeschynomene.

- stems, nodulation, Rhizobium, characterization 7836.

Aeschynomene indica, nitrogen fixation, Rhizobium, growth conditions 3244.

- Aeschynomene virginica,**

- weed control, Colletotrichum gloeosporioides f.sp. aeschynomene 2835.
- weed control, Oryza sativa, biological control, Colletotrichum gloeosporioides f.sp. aeschynomene 6630.

Aessosporon, enzymes, electrophoresis 7422.**Affinity chromatography, Fusarium graminearum galactose oxidase purification, characterization 7364.**

- hydrolyases purification, reviews 1898.
- lectins, isolation, infectious anemia virus envelopes glycoproteins 8097.
- purification, membrane vesicles, pili, Neisseria gonorrhoeae 835.
- vests aspartate aminotransferase 1856.

endo-1,3(4)- β -D-glucanase, Basidiomycetes 8302.

- Affinity labelling,**
- fatty-acid synthetase, use tetrahydrocerulenin, Cephalosporium caerulens 8883.

Aflatoxicosis, aflatoxin B1, feeds contamination, pigs 3866.

- animals, interaction, metals, dietary intake, reviews 4900.
- animals, interaction vitamins nutrition 4899.

Aflatoxin B, Aspergillus parasiticus, bread 2065.**Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.**

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Aflatoxin B1, Aspergillus flavus, acetic acid incorporation association biosynthesis 6692.

- carcinogenesis, liver, rats, proteins nutrition effect on 4902.
- contamination, gram 7616.
- contamination, Spodoptera frugiperda pest outbreaks, drought effects on, Zea mays 4887.

Subject Index

- Aflatoxins, (continued)**
urine, man, detection methodology 1100.
- Africa,**
Cucumis melo, squash mosaic virus infection 1237,
tropical environment, organic matter decomposition, soil microorganisms 4186.
- Africa, East,**
epidemics, *Solanum tuberosum* late blight 420.
Poaceae rust, incidence 9365.
- Agar,**
+ autoclave dehydration, incubation 819.
+ Autoclave test, identification, *Streptococcus* group D 9908.
bacteria, excretion, surfactants, effects on, surface tension, measuring techniques, mathematical models 5378.
blood culture, media (selective), *Capnocytophaga* 9906.
coliforms enumeration, membrane filtration 3568.
media, comparison, *Vibronaceae* oxidase test 9043.
media (culture), freeze-drying, bacteria 5386.
media (culture), growth conditions, *Methanococcus maripaludis*, *Methanococcus* *volutae*, methodology 9050.
media (isolation), *Neisseria gonorrhoeae* 9959.
media, selection, *Claviceps* alkaloids production 5562.
methodology, media (selective), *Escherichia coli* 2702.
- Agar diffusion test,**
antibacterial activity, cephalosporins, penicillins, *Pseudomonas aeruginosa* 728.
antibiotic sensitivity testing, quality control 713.
cefotaxime, antibiotic sensitivity testing 6120.
cefazidime, antibiotic sensitivity testing, *Escherichia coli*, *Staphylococcus aureus*, *Pseudomonas aeruginosa* 4371.
media (culture), aminoglycoside antibiotics 6102.
sulfonamides, antibiotic sensitivity testing, sulfonamides, *Mycobacterium* 9657.
Vibrio, antibiotic sensitivity testing 3388.
- Agar dilution test,**
Ekennella corrodens, comparison, broth dilution test, drug sensitivity testing 2445.
- Agaricales,**
ectomycorrhizas, evolution, reproductive strategy 9535.
low molecular weight metabolites, taxonomic significance, evolution 5461.
- Agaricus,**
lung infection, disease control, prochloraz 4118.
- Agaricus bisporus,**
agaritine characterization 3725.
agaritine isolation, high-performance liquid chromatography methodology 2712.
catechol oxidase, photoinactivation 9178.
cellulase biosynthesis, relationship, mycelia growth 6559.
Chaetomium olivaceum biological control, *Bacillus* use 3052.
culture, composts, reviews 9281.
cultivation, lignocellulose degradation, nutritive value, reviews 7596.
dry bubble disease, *Verticillium*, pathogenicity 2218.
growth, *Aspergillus*, aflatoxins production 8501.
mycelia, chitin synthase isolation, characterization 4624.
nucleic acids levels, mushroom poisoning relationship 1961.
nutrition, association, microorganisms biomass, straw composts 2923.
6-phosphofructokinase stimulation, fructose 2,6-bisphosphate role 9130.
Pseudomonas tolaasii, attachment, scanning electron microscopy, blight 3051.
volatiles, aroma compounds, chemical composition 4772.
volatiles, *Megaselia halterata* oviposition attractants, chemical composition 8661.
- Agaricus bisporus,**
dry bubble disease, *Verticillium*, pathogenicity 2218.
- Agaricus brunneus,**
cultivation techniques, reviews 5614.
cultivation, technology, species use, USA, reviews 4825.
nutritive value, characterization 3846.
- Agaritine,**
characterization, *Agaricus bisporus* 3725.
isolation, *Agaricus bisporus*, high-performance liquid chromatography methodology 2712.
- Agarose,**
Thiobacillus denitrificans entrapment, nitrate, reduction 874.
- Agave sisalana,**
leafspot, viruses 7698.
plant extracts, antifungal activity, aflatoxins biosynthesis, *Aspergillus flavus*, *Aspergillus parasiticus* 5645.
- Age,**
Allium cepa leaves, relationship, *Alternaria porri* infection sensitivity 4009.
effects on *Manihot esculenta* blight, incidence, development, *Xanthomonas manihoti* 4016.
effects on mortality, *Amanita phalloides* mushroom poisoning, man 9280.
Hordeum vulgare, association, disease resistance, powdery mildew 6857.
leaves, effects on disease resistance, *Hemileia vastatrix*, leaf rust, *Coffea arabica* 4976.
leaves, *Solanum tuberosum*, disease transmission, potato leaf roll virus, *Myzus persicae* 2182.
Nicotiana rustica, effects on rhizosphere microorganisms 7795.
relationship, *Pinus sylvestris* leaves, fungi infection 4177.
Rhizobium japonicum cell culture, effects on infectivity, *Glycine* max 2112.
toxicity, factors affecting, *Bacillus thuringiensis*, *Culex quinquefasciatus*, *Aedes aegypti*, *Anopheles albanus*, *Anopheles quadrimaculatus* 8380.
- Agglutination,**
assays, *Escherichia coli* pili antigens 5383.
Brucella antibodies 4484.
detection, enterotoxins, *Escherichia coli* 9305.
detection, enterotoxins, *Escherichia coli* 9311.
factors, *Ceratomyxalis limbatata* spores, isolation, characterization, *Corcosia esculenta* black rot 4993.
identification, *Shigella flexneri*, *Shigella boydii* 4483.
Ipomoea batatas, roots, extracts, *Ceratomyxalis limbatata*, spores, host specificity, black rot 3095.
Leptospira biflexa antigens, immunodiagnosis, *Leptospirosis*, man 5380.
Leptospira, micromethods, standardization, antigens concentration association 7260.
measuring techniques, *Vibrio cholerae* toxins, *Escherichia coli* enterotoxins 9302.
methodology, detection, rubella virus antibodies 9636.
methodology, *Streptococcus* group D identification 9935.
methodology, *Streptococcus* groups, antigens use 3563.
+ nitrous acid extraction, diagnosis, *Streptococcus pharyngitis*, man 9905.
- Agglutination, (continued)**
receptors specificity, use, identification, *Escherichia coli* + pili 880.
Rhizobium leguminosarum interaction *Vicia faba* lectins, 2,4-D, 2,4,5-T, effects on 8692.
sheep red blood cells, antibodies coatings, detection, rotavirus (human) 9856.
Staphylococcus protein A, assays, rotavirus 8105.
Streptococcus, identification 4499.
tests, methodology, *Mycoplasma*, *Salmonella pullorum*, Newcastle disease virus vaccines 2648.
use, detection, *Salmonella typhi* antigens, feces isolates association typhoid fever 841.
use, serotyping, *Shigella dysenteriae*, *Shigella boydii* 5405.
- Agglutinine,**
Glycine max leaves, disease resistance, *Pseudomonas glycinea* 3128.
Glycine max, relationship disease resistance, *Phytophthora megasperma* var. *sojae* 1371.
Solanum tuberosum, hypersensitive response, wilt, *Pseudomonas solanacearum* 3127.
- Aging,**
microorganisms, metabolism interaction, association, *Triticum* cultivation 3943.
- Agitation,**
effects on *Aspergillus niger*, citric acid biosynthesis 3642.
effects on *Aspergillus niger*, citric acid biosynthesis 3644.
effects on oxytetracycline biosynthesis, *Streptomyces rimosus* 2563.
fermenters, *Aspergillus niger*, pelleting, morphology 6637.
- Algaenema commutatum,**
leafspot, *Myrothecium roridum* 5747.
- Agmatine oxidase,**
Penicillium chrysogenum, purification, characterization 1861.
- Agricultural ecosystems,**
nitrogen cycle, *Oryza sativa* 3224.
nitrogen cycle, plantations, *Coffea* 3217.
nutrient sources, nitrogen fixation, *Inga jinicuil*, *Coffea* 3226.
soil microorganisms, regulation, biogeochemistry, nitrogen cycle 3221.
- Agricultural land,**
fertilization, nutrient availability, phosphate, humus complex, actinomycetes, fungi 9625.
soil chemistry, acidity, nitrogen fixation, *Leguminosae* 5956.
soil microorganisms, biomass, activity 8662.
soil microorganisms, insecticides effects on enzymes activity 5969.
- Agricultural practices,**
burning, soil microorganisms, population levels 9622.
Cephalosporium gramineum stripe incidence, *Triticum aestivum* 4960.
disease control, stem rot, *Phoma lingam*, *Brassica napus* 495.
disease spread, plant diseases, viruses, reviews 2978.
effects on, cellulose biodegradation, cellulolytic microorganisms, crop fields 5982.
effects on, incidence, bunt, *Neovossia indica*, *Triticum aestivum*, 1159.
effects on incidence, *Gaeumannomyces graminis*, var. *tritici*, take-all, *Triticum aestivum* 9361.
effects on pathogenicity, *Botrytis cinerea* rot, *Vitis vinifera* fruits, USA, California 7685.
effects on soil microorganisms, biomass, enzymatic activity, crop fields 5980.
Fragaria vesca red core disease control, association, fenamoxon, dazomet 1415.
meadows, bacteria biomass, soil, rhizosphere, leaf 9534.
nitrate mineralization, soil microorganisms, seasonal variations 8684.
research programs, symbiosis, *Leguminosae*, *Rhizobium*, Latin America 3227.
soil amendment, waste water, microbiology, bibliographies 2807.
soil microorganisms, mycotoxins, conferences 6368.
soil-borne diseases, reviews 7648.
use, microorganisms, books 8174.
use, vesicular-arbuscular mycorrhizas, symbiosis, plants, reviews 4188.
vesicular-arbuscular mycorrhizas inoculum production, nutrient uptake 9540.
- Agricultural products,**
media, *Bacillus sphaericus* growth, sporulation 9041.
- Agriculture wastes,**
silage effluents, digestion (anaerobic), methanogenesis 8963.
- Agriomonia pilosa,**
roots, extracts, antimicrobial activity 8800.
- Agrobacterium,**
agrocin resistant mutant, mutation frequency 2417.
crown gall, *Carya ilicifolia*, pathogens characterization, biological control, use, *Agrobacterium radiobacter*, USA, Georgia 3971.
crown gall induction, plants 4928.
media (selective) 7256.
plants pathogens, preservation, gels + cold storage 2688.
- Agrobacterium radiobacter,**
biological control, crown gall, *Agrobacterium tumefaciens*, *Phaseolus vulgaris* 2838.
extracellular polymers, polysaccharides structure 9198.
monoclonal antibodies, biosynthesis, association, sulfur, metabolism 5266.
Polysaccharides, carbohydrate composition, seed treatments, inhibition damping-off, *Pythium ultimum*, *Beta vulgaris* 7710.
soil bacteriostasis 3179.
use, biological control, *Agrobacterium* crown gall, *Carya ilicifolia*, USA, Georgia 3971.
- Agrobacterium radiobacter var. tumefaciens,**
crown gall, *Gossypium hirsutum* roots 1307.
- Agrobacterium rhizogenes,**
agrocin resistant mutant, mutation frequency 2417.
virulence plasmids, transfer methodology, R factors use 4488.
- Agrobacterium tumefaciens,**
agrocin, purification, host range, biological control, crown gall 4716.
agrocin resistant mutant, mutation frequency 2417.
attachment mechanisms, *Asparagus officinalis*, factors affecting 7687.
crown gall, biological control, *Agrobacterium radiobacter*, *Phaseolus vulgaris* 2838.
crown gall, cell adhesion, initiation *Helianthus* 3060.
crown gall, *Chrysanthemum morifolium* 1306.
crown gall induction, N2-(1,3-dicarboxypropyl)-L-leucine isolation 6390.
crown gall, *Nicotiana tabacum* DNA organization 2202.
crown gall, *Nicotiana tabacum* tumors morphology, genetic control 7689.
crown gall, plant cells binding, host range 2977.
crown gall, plants genetic engineering 9318.
crown gall, temperature effects on, *Helianthus annuus*, *Kalanchoe* 8574.
disease spread, rhizosphere, roots, *Cucumis sativus* 4997.
extracellular polymers, polysaccharides structure 9198.

- Agrobacterium tumefaciens, (continued)**
isolation, galls, sap, *Vitis vinifera*, pathogenicity 5744
superoxide dismutase activity, *in vitro*, *in vivo*, *Bryophyllum calycinum* crown gall 5013.
Ti plasmid, crown gall, genetic engineering 5788.
Ti plasmid DNA analysis, *Nicotiana tabacum* crown gall 7690
Ti plasmid DNA, detection methodology 9980.
Ti plasmid, infection, plants, gene transfer 4922.
tumors induction, *Kalanchoe*, osmotic pressure effects on 4029.
- Agrochemicals,**
effects on, *Tinophyton ajelloi*, biodegradation, wool 5593.
- Agrocin,**
Agrobacterium tumefaciens, purification, host range, biological control, crown gall 4716.
resistant mutant, *Agrobacterium*, mutation frequency 2417.
- Agroclavine-1,**
Penicillium corylophilum, biosynthesis 1973.
- Agropyron intermedium,**
nutritional status, smut, *Cochliobolus sativus*, effects on 8548.
- Agropyron trachycaulum,**
association, vesicular-arbuscular mycorrhizas, strip mines, soil amendment, effects on, spores 1480.
roots, vesicular-arbuscular mycorrhizas colonization, soil amendment, revegetation, land reclamation, mines 9542.
vesicular-arbuscular mycorrhizas, petroleum sand 5916.
vesicular-arbuscular mycorrhizas symbiosis, mines soil+soil amendment 4203.
- Agrostis palustris,**
blight, *Pythium ultimum*, predictions, climatic conditions 9362.
Gaeumannomyces graminis f.sp. *avenae*, infection, pathology 5713.
pathogenicity, *Rhizoctonia zeae* 5701.
Sclerotium rofskii infection, disease control, antifungal agents 1397.
- Agrostis tenuis,**
blight, *Sclerotium rofskii*, basidiospores, role, pathogenesis 9339.
dollar spot, *Sclerotinia homoeocarpa*, resistance, iprodione, benomyl 6010.
- Agrotis segetum,**
granulose virus, production methodology, biological control 8359.
larvae, mass rearing, production, granulosis virus, biological control 9211.
- Alanthus excelsa,**
leafspot, *Phoma medicaginis* var. *pinodella*, India 2221.
- Air,**
composition, effects on, grey mold, *Botrytis cinerea*, *Fragaria chiloensis* var. *anassua* 5020.
drying aldehydes, association, viruses infectivity 7195.
filtration, stenility, aeration, fermentation 7119.
foot-and-mouth disease virus sampling, methodology comparison 6291.
- Air flow,**
filtration, fermentation 9003.
filtration, sterilization, fermentation 8348.
- Air pollution,**
carbon monoxide oxidation, bacteria 9795.
ozone effects on *Fomes annosus* pathogenicity, *Pinus* roots 541.
pollution effects, fungi, plant diseases, mortality, forests 6926.
sensitivity, *Pinus strobus*, relationship *Verticillidiella proceri* roots infection, *Pisodates approximatus*, *Hyllobius*, infestation 5866.
sulfur dioxide, effects on early blight, *Lycopersicon esculentum* 6819.
sulfur dioxide, effects on soil microorganisms, forests 5854.
- Air spora,**
analysis, *Pycularia pennisi*, leafspot, *Pennisetum typhoides* 4000.
Deuteromycetes, media (culture) 4512.
Fusarium moniliforme, contamination, *Asparagus* flowers 9414.
- Air-water interface,**
microorganisms, isolation, ponds, scanning electron microscopy, observation techniques 8088.
- Albino bacteria,**
sampling, laboratories 1729.
- Albino microorganisms,**
antimicrobial activity, synergism, ethanol+sodium chloride+acetic acid+essential oils 7115.
Aspergillus flavus, respiratory tract isolates, man, hospitals, relationship, buildings construction 3493.
Deuteromycetes, media (culture) 4512.
disinfectants aerosols 5346.
fungi, infection, wood, burning effects of public health, man 4454.
fungi, nosocomial environments 5340.
fungi, wind velocity, effects on, enumeration 1813.
infection, man, nosocomial environments 2636.
pathogens, control, operating theaters 7206.
poultry processing, association, chickens feces 1727.
samplers methodology 2644.
sampling methodology comparison 7214.
varicella-zoster virus, varicella, man, nosocomial environments, disease spread 3490.
- Albino particulates,**
aflatoxins, assays, food contamination, corn 4886.
- Alga reptans,**
ringspot, association, tobacco streak virus, broad bean wilt virus, cucumber mosaic virus, alfalfa mosaic virus 3043.
- Aleostatin,**
antibiotic synergism, cephalixin, index, fractional inhibitory concentration 7989.
- Alamethicin,**
structure, N.M.R. 8036.
- Alamine aminotransferase,**
activity, rhizosphere microorganisms, factors affecting 5911.
- Alanine,**
biosynthesis, *Corynebacterium* dismutans, immobilized cells 9133.
enantiomers, ratio, detection methodology, gas chromatography 7240.
peptides, binding erythromycin A, antibacterial activity 1632.
- L-Alanine,**
biosynthesis, *Pseudomonas dacuhas* immobilized cells 2745.
production, *Escherichia coli*, *Pseudomonas dacuhas*, aspartate ammonia-lyase, L-aspartate- β -decarboxylase 927.
- β -Alanine,**
detection, cell surface, *Staphylococcus aureus* 1834.
derivatives, effects on disease transmission, beet yellows virus, potato virus Y, *Myzus persicae* 3108.
- Alatospora acuminata,**
biodegradation, *Populus tremuloides*, leaf litter 8045.
- Albocycline,**
structure, X-ray crystallography 3441.
- Albomycin 6,**
structure, C.D., U.V. spectroscopy, mass spectroscopy, N.M.R., *Streptomyces* 2573.
- Albomycin 61,**
structure, C.D., U.V. spectroscopy, mass spectroscopy, N.M.R., *Streptomyces* 2573.
- Albomycin 62,**
structure, C.D., U.V. spectroscopy, mass spectroscopy, N.M.R., *Streptomyces* 2573.
- Albugo occidentalis,**
blue mold, *Spinacea oleracea* disease control, metalaxyl+chlorothalonil treatment 5064.
- Albumen,**
supports, bactericidal activity, enzymes immobilization 9668.
- Albumin,**
binding, aflatoxins, characterization 299.
cattle serum, *Haemophilus influenzae* polysaccharides conjugate, hydrodynamics, light scattering 978.
lysozyme, antibacterial activity 7052.
receptors, hepatitis B virus, detection, radioimmunoassay 6295.
urine, enzyme immunoassay, solid phase methods, *Staphylococcus aureus* protein A 5397.
- Alcaligenes,**
antibacterial activity, β -lactam antibiotics 4340.
antibiotic sensitivity testing, nosocomial infection, man 6098.
bacteria growth, association carbon 8069.
denitrification, hydroxylamine, pyruvic oxime, nitric-oxide reductase, nitrate reductase, soil 596.
indole biodegradation 8450.
pesticides (organophosphorus) hydrolysis phosphatase, purification 2773.
styrene dimers biodegradation 7558.
symbiosis, algae, photosynthesis, starch biosynthesis 3708.
- Alcaligenes eutrophus,**
hydrogen dehydrogenase, +lactate dehydrogenase, immobilized enzymes, use, NADH regeneration 8314.
lactate dehydrogenase purification, characterization 4591.
lactate dehydrogenase, purification, characterization 6488.
+*Pseudomonas putida*, mixed culture, arsenic oxidation 2383.
- Alcaligenes faecalis,**
azn, N.M.R. 920.
biodegradation, 3-cyclohexenecarboxylic acid 1053.
 β -glucans, chemical modification, antitumor activity, mice 7448.
immobilized cells, β -glucosidase activity 4585.
media (culture) 5411.
- Alcaligenes faecalis var. myxogenes,**
extracellular polymers, polysaccharides, production 3712.
- Alcohol acetyltransferase,**
yeasts, use assays, acetyl-CoA 5436.
- Alcohol dehydrogenase,**
activity, *Lactobacillus*, effects on milk flavor 7587.
activity, yeasts, immobilized enzymes, bioreactors 7361.
3-chloroacetylpyridine-adenine dinucleotide inactivation, yeasts 934.
Saccharomyces cerevisiae subtydians, purification, crystallization 5883.
inactivation, NAD⁺ analogs, yeasts 4627.
kinetics, iron(II) activation, *Zymomonas mobilis* 7407.
oxidation, ochratoxin A metabolites 4894.
Pseudomonas fluorescens, isolation, purification, characterization 7381.
purification, kinetics, mechanisms, cell membranes, *Pseudomonas aeruginosa* 7406.
Saccharomyces cerevisiae immobilized cells, NADH regeneration 4601.
yeasts, bioassays, bile acids 4504.
zinc binding, polarography, yeasts 6496.
Zymomonas mobilis, purification, characterization, association, ethanol production 6487.
- Alcohol dehydrogenase (acceptor),**
mechanisms, role pyrolo-quinoline semiquinone, R.S.R., *Hyphomicrobium* 2789.
purification, characterization, cytoplasmic membranes, acetic acid bacteria 4647.
- Alcohol oxidase,**
inactivation, *Hansenula polymorpha*, selectivity, high-performance liquid chromatography 98.
- Alcoholic beverages,**
colonche, fermentation, *Saccharomyces cerevisiae*, *Candida valida*, biochemical characteristics 243.
food quality, yeasts culture effects on 1050.
production, enzymes use, USSR 6677.
- Alcohols,**
association, methylketone, production, *Nocardia paraffinica*, *Brevibacterium*, *Pseudomonas fluorescens* 7460.
derivatives, enantiomers separation, use alkaline phosphatase, *Escherichia coli* 8289.
fermentation, use, grain, association, noncooking methodology 1045.
production, yeasts, fermentation 7517.
- Aldehyde dehydrogenase,**
isozymes, purification, characterization, *Pseudomonas aeruginosa* 4650.
Rhizobium japonicum, purification, activity 22.
- Aldehyde dehydrogenase (NAD(P)⁺),**
purification, characterization, *Saccharomyces cerevisiae* 4648.
- Aldehyde dehydrogenase (NADP⁺),**
purification, characterization, *Proteus vulgaris* 4649.
- Aldehydes,**
hydrogenation, *Clostridium*, immobilized cells 10.
luminous bacteria, isolation, characterization 8372.
- Aldicarb,**
effects on, rhizosphere microorganisms, *Rhizoctonia solani*, *Verticillium albo-atrum*, wilt, *Solanum tuberosum* 1512.
- Aleuria aurantia,**
lectins, purification, physicochemical properties 6377.
- Alfalfa mosaic virus,**
detection methodology, sap, plants 2980.
host range, plant diseases, *Lycium* 3085.
infection, hypersensitive response, leaves proteins 1333.
infection, *Medicago sativa*, epidemiology, *Aphididae* vectors 5696.
infection, *Pachysandra terminalis*, symptoms, new records 1241.

Alfalfa mosaic virus, (continued)

- infection, Trifolium repens, pathology, association, Aphididae filters prevention transmission 1147.
- infection, Vitis vinifera 3068.
- infection, yield reduction, Medicago sativa 2102.
- Medicago sativa disease reservoirs 3929.
- mixed infection, \pm grapevine fanleaf virus, \pm strawberry latent ringspot virus, Vitis vinifera 2178.
- plant diseases, host range, New Zealand 9317.
- respot, Avena repens 3043.
- Trifolium repens, Medicago sativa, plant diseases, pathology 2996.

Algae,

- biological oxygen demand, pollution monitoring, sewage effluents 2614.
- growth, relationship, wastewater treatment nutrients removal 5329.
- single-cell protein, nutritive value, production, economics, technology 9107.
- soil, Antarctica 1475.
- symbiosis, bacteria, photosynthesis, starch biosynthesis 3708.
- wastewater treatment ponds, population growth, symbiosis, bacteria 2605.

Alginatase,

- biosynthesis, aquatic bacteria isolation 97.

Alginate acid,

- biosynthesis, *Pseudomonas aeruginosa* mucoid form 2746.
- propylene glycol, use, enzymes immobilization 6557.

Alcaligenes faecalis,

- immobilization, polyacrylamide polymerization 9970.

Aliphatic nitrile hydratase,

- Arthro bacter, purification, characterization 1895.
- Pseudomonas chlorophensis*, acrylamide biosynthesis 1982.

Alkaline phosphatase,

- Escherichia coli*, biosynthesis, relationship structure, biochemical characteristics 8294.
- Escherichia coli*, subunit association, formamide effects on, metals role 2770.
- Escherichia coli*, use, enantiomers, separation, alcohols derivatives 8289.
- Gibberia fasciculatum*, roots, *Arachis hypogaea* 6947.
- levels, vesicular-arbuscular mycorrhizas, roots, Vigna unguiculata 9560.
- purification, characterization, *Bacillus vitellinus* 3700.
- role alkalooids production, *Claviceps* 7492.
- role, *Streptomyces gneiseus streptomycin* biosynthesis 2557.
- role, cholerae, activity, rifampicin antibiotic resistance 6018.

Alkaloids,

- biosynthesis, catabolism, *Claviceps* 7459.
- biosynthesis, *Claviceps paspali* strains selection, fermentation 6629.
- biosynthesis, *Claviceps purpurea*, environmental effects 129.
- biosynthesis, penicillium cyclopium, P-factor stimulation 3705.
- biosynthesis, production, role acid phosphatase, alkaline phosphatase 7492.
- Claviceps*, production, selection, agar media 5562.
- Claviceps purpurea*, biosynthesis 5545.
- Civia miniata, antiviral activity 6069.
- Epichloe typhina, accumulation, *Festuca arundinacea* 7499.
- ergot, biosynthesis, β -naphthylalanine induction, *Claviceps* 6590.
- ergot, biosynthesis, *Claviceps purpurea* 5557.
- ergot, *Claviceps purpurea*, biosynthesis, association, morphology 3867.
- hypersensitive response, *Phytophthora infestans*, tubers, *Solanum tuberosum* 3089.
- lactamides, *Nocardia restricta*, I.R. spectroscopy 8373.
- mycotoxins, *Penicillium crustosum* production, beer contamination 8503.
- penicillium cyclophilum, biosynthesis 1973.
- salts, antibacterial activity 7917.
- Streptomyces xanthochromogenus*, structure 1977.
- 1,2,8-trihydroxy-octahydroindolizine, *Rhizoctonia leguminicola*, characterization 7500.

Alkanal monooxygenase (FMN-linked),

- assays, bacteria 9163.
- bioluminescence kinetics, mechanisms, *Vibrio harvey* 7390.
- heat inactivation, bacteria 6479.

Alkane 1-monooxygenase,

- isolation, *Pseudomonas putida* cell disruption, n-alkanes oxidation 5507.

Alkanes,

- Candida guilliermondii*, effects on autolysis 7867.
- biodegradation, hydroxylation, methylotrophic bacteria 4761.
- nutrient sources, *Candida oleophila* biomass production, fermenters 7535.
- Pseudomonas putida*, biodegradation 626.
- utilization, *Saccharomyces lipolytica*, association, citric acid biosynthesis 6396.

n-Alkanes,

- metabolism, *Candida* 5996.
- oxidation, *Pseudomonas putida* cell disruption, alkane 1-monooxygenase isolation 5507.
- utilization, *Candida oleophila*, biomass production 5993.

Alkanna hirsutissima,

- shikonin- β -D-methylacrylate, antibacterial activity, *Micrococcus luteus*, *Staphylococcus aureus*, *Bacillus subtilis* 7081.

Alkenes,

- oxidation, hydroxylation, methylotrophic bacteria 4761.
- epoxidation, methane monooxygenase, formate dehydrogenase role, generation NADH, *Methylosinus* 6474.

Alkyl dimethylbenzyl ammonium chloride,

- Escherichia coli*, effects on, cytoplasmic membranes, ribosomes 5184.

Alkyl phenoxypolyethoxides,

- effects on, microorganisms, membrane permeability, enzymatic activity 7957.

1-Alkyl-1,4-dihydro-7-methyl-4-oxoquinoline-3-carboxylic acids,

- derivatives, antibacterial activity 2435.

4-Alkylarylthiopyrazoles,

- antifungal activity, phytopathogenic fungi 6875.

Alkylbenzene sulfonates,

- biodegradation, microorganisms, association, aromatic compounds 1997.

Alkylidimethylbenzyl-ammonium chlorides,

- antibacterial activity, antifungal activity 7910.

Alkylpyridinium iodides,

- antimicrobial activity, *Escherichia coli*, *Micrococcus luteus*, yeasts 1587.

Allelopathy,

- phytoalks, *Polygonum aviculare* 8683.

Allergenicity,

- Paeclomyces varioti* proteins feeds, occupational exposure, man 7607.

Allium,

- Botrytis allii*, infection, cytotofluorometry 3975.
- mycorrhizas, competition, interspecific relationships, *Glomus* 5894.

Allium, (continued)

- odor compounds, flavor compounds, induction, sclerotia formation, *Sclerotium cepivorum* 4001.
- Sclerotium cepivorum*, white rot, *Bacillus subtilis*, use, biological control 6592.
- Sclerotium cepivorum* white rot, disease control, vapam 9492.

Allium cepa,

- blight, *Botrytis squamosa conidia* release, weather relationship 5771.
- cultivars, symptoms, scald, *Alternaria porri* 3988.
- dew, temperature, effects on, *Botrytis squamosa*, infection 8591.
- disease resistance, *Botrytis allii* rot 3986.
- food processing, microbiology, bacteria 3843.
- Fusarium oxysporum f.sp. cepae*, *Pirenochaeta terrestris*, effects on, yield, experimental infection 2191.
- Glomus mosseae* infection monitoring, chitin, mannans, levels 3170.
- Glomus* symbiosis, growth association 9549.
- hybrids, cultivars, purple blotch, *Alternaria porri*, incidence, Brazil 7713.
- infection, amino acids levels, *Sclerotium cepivorum* 5751.
- infection, *Botrytis allii*, *Colletotrichum cirsianis*, fluorescence association, factors affecting 8584.
- leaves, age, relationship, *Alternaria porri* infection sensitivity 4009.
- lipid composition, carbohydrate composition, organic acids composition, white rot, *Sclerotium cepivorum* 5760.
- metabolism changes, *Botrytis allii* infection 9443.
- mycorrhizas effects on growth 586.
- nutrient uptake, role, endomycorrhizas, association, soil salinity 7804.
- phosphate uptake, vesicular-arbuscular mycorrhizas 5646.
- phosphorus uptake, drought tolerance, *Glomus etunicatus* stimulation 4200.
- pink rot, new records, Sudan 1277.
- rot, *Botrytis allii*, soil-borne diseases, inoculum persistence 2220.
- rot, *Pseudomonas marginata*, association, *Pseudomonas aeruginosa* browning 3063.
- seeds γ -radiation effects on white rot incidence 1426.
- white rot, disease control, *Bacillus subtilis* seed treatments 5848.
- white rot, *Sclerotium cepivorum*, lipid composition 5756.
- white rot, *Sclerotium cepivorum*, pathology, disease control, reviews 1260.
- white rot, seed treatments, biological control, *Bacillus subtilis \pm fungicides 4103.*

Allium porrum,

- endomycorrhizas colonization, growth, phosphorus nutrient availability effects on 9543.
- Glomus mosseae* symbiosis, carbon uptake 1471.
- nutrient uptake, phosphorus, nutrient availability, endomycorrhizas 9544.
- stunt, methyl bromide fumigation induction, endomycorrhizas role growth 5913.

Allium sativum,

- antibacterial activity, *Coxiella burnetii* infection, chickens 668.
- extracts, antibacterial activity, *Bacillus cereus* 1549.
- extracts, antifungal activity 3336.
- viruses elimination, menstem tip culture 1385.

Allolobophora caliginosa,

- effects on soil, respiration, enzyme activity 5103.

Alloformin,

- physicochemical properties, *Aspergillus niger* 786.

Allopurinol,

- association 5-fluorocytosine susceptibility, fungi 8790.

Allosteric properties,

- citrate (s)-synthase, subtilisin proteolysis effects on, *Acinetobacter calcoaceticus* 4677.
- lactate dehydrogenase, E.S.R., *Lactobacillus casei*, *Lactobacillus curvatus* 39.

Allyl myrtil,

- vectors, disease transmission, mycoplasma-like organisms, stunt, Ribus 2169.

Allyl alcohol,

- treatment, *Phellinus weirii* infection, *Pseudotsuga menziesii* 545.

Alnus,

- Frankia isolates characteristics 2227.
- nodules, rhizosphere, *Actinomyces* isolation, antibiotic sensitivity testing 664.

Alnus crispa,

- colonization, Frankia, *Alpova diplophloeus*, Hartig net 7776.

Alnus glutinosa,

- growth, nodulation, soil pH, phosphorus effects on 555.
- nodulation, Frankia, actinorrhizas, growth 5967.
- nodules, Frankia, plasmids 560.
- stem canker, *Phomopsis alnea* 5868.

Alnus incana,

- roots nodules, nitrogen fixation, ammonium effects on 3220.

Alnus rubra,

- actinorrhizas, Frankia alni, nitrogen fixation 5958.
- nodulation, nitrogen fixation, interaction *Populus*, biomass, mixed culture, silviculture 9512.
- nodules, nitrogen-fixing bacteria, measuring techniques, acetylene reduction, gas exchange 1496.

Alnus rugosa,

- colonization, Frankia, *Alpova diplophloeus*, Hartig net 7776.

Alpine environments,

- Austria, leaf litter organic matter biodegradation, microorganisms 9556.
- Dicystostelium, ecological distribution 1482.
- Dicystostelium, species composition, ecological distribution 1479.

Alpova diplophloeus,

- Hartig net, Frankia colonization, *Alnus crispa*, *Alnus rugosa* 7776.

Alternaria,

- altertoxin I structure 5650.
- α -amylase, hemicellulase, production 6404.
- blueberries post-harvest decay, moisture effects on 5032.
- chemicals, antifungal activity 3336.
- colonization, *Sorghum bicolor* stalks, roots 5715.
- contamination, kiwifruit post-harvest decay, USA, California 5031.
- drug sensitivity testing, aculeacin A 4308.
- fruit rot, disease control, fungicides, *Ficus carica* 1396.
- fruit rot, *Lycopersicon esculentum* 6807.
- fruit rot, *Malus*, incidence, disease control 3031.
- fungal flora, *Fagus grandifolia* bark 1438.
- infection, blueberries, post-harvest decay, disease control, carbon dioxide storage 3106.
- infection, *Sorghum vulgare*, pathology, ergosterol 5720.
- leafspot, *Brassica actinophylla*, irrigation effects on pathogenesis 1274.
- leafspot, *Cajanus cajan*, India 3926.
- leafspot, pathology, *Schefflera arboricola*, *Brassica actinophylla* 3993.

ternaria, (continued)

- plant diseases, phytotoxins disease resistance, India, reviews 1369.
post-harvest decay, cantaloupes, control, use, benomyl+guazatine 6835
post-harvest decay, disease control, fungicides, cantaloupes 1399.
soaps contamination 2641.
spore germination, iprodione, thiophanate methyl, effects on 7765.
toxicity, association, black tip, rice 3863.
ternaria alternata,
antifungal activity, dithiocarbamates 3153.
antifungal activity, Lycopersicon lycopersicum pollen 8605.
infection, Pisum sativum 1136.
effects on seeds germination, Phaseolus mungo 3924.
growth, Helianthus annuus, dew, temperature, light, effects on 6800.
infection, capsicum annuum, penetration mechanisms 2215.
infection, Passiflora edulis, brown spot, characterization 399.
infection, Vigna radiata, biodegradation, seed-borne diseases 3915.
latent infection, role, post-harvest decay, mangos 6834.
leaf blight, Eclipta alba 8571.
leafspot, Cymbopogon martinii 3985.
microflora, Hordeum, fungicides treatment effects on 7766.
post-harvest decay, Sesamum indicum seeds, proteins levels 7717.
oil, herbicides effects on 8707.
stem rot, association, benomyl, disease control, blue mold, Penicillium expansum, Pyrus communis 9373.
ternaria brassicae,
incidence, Brassica seed crops, British Isles, surveys 4042.
ternaria brassicicola,
Brassica oleracea seeds leafspot, disease control, iprodione 508.
incidence, Brassica seed crops, British Isles, surveys 4042.
infection, Brassica oleracea seeds, epidemiology 1229.
leafspot, incidence, pathogenicity, Brassica oleracea var capitata, Brazil 6818.
ternaria carthami,
infection, Carthamus tinctoria, effects on yield 1250.
infection, Petroselinum hortense cell culture, phytoalexins induction 5765.
ternaria cassiae,
seedling blight, Cassia obtusifolia, Cassia occidentalis, Crotalaria spectabilis 1286.
ternaria cucumerina,
leaf blight, Cucumis melo, disease control, factors affecting pesticide applications 3150.
ternaria dausi,
blight, disease control, foliar applications, fungicides, spraying equipment, Daucus carota 9484.
ternaria helianthi,
blight, inoculum production, Helianthus annuus 5746.
deoxyradicinin, structure 2967.
infection, disease resistance, Helianthus 5766.
infection, Helianthus annuus, factors affecting 6799.
infection, Helianthus annuus, leafspot, stem spot 1255.
sporulation, survival, Helianthus annuus infection 7712.
ternaria kikuchiana,
phytooxins, structure 301.
ternaria macrospora,
infection, pathogenesis, Gossypium barbadense, cotyledons, susceptibility 9391.
ternaria pamax,
blight, Brassica actinophylla, Schefflera arboricola, benomyl effects on 6882.
blight, Polyosias fruticosa, foliar diseases 3090.
infection, Brassica actinophylla, insecticides soaps, foliar applications 9486.
infection, Schefflera actinophylla, new records 5763.
ternaria porri,
infection, sensitivity, relationship, Allium cepa leaves age 4009.
purple blotch, incidence, Allium cepa, hybrids, cultivars, Brazil 7713.
infection, Allium cepa, Allium cepa, cultivars 3988.
ternaria solani,
alternaric acid, induction sesquiterpenes, tubers, Solanum tuberosum 5051.
antifungal activity, 1-(carbethoxymidino)-O-alkylisourea jockey(II) derivatives 5205.
antifungal activity, 2-(pyridinylthio)methyl benzoate N-oxides 5204.
early blight, biological control, Streptomyces longisporus antagonism, Solanum tuberosum 4105.
early blight, Lycopersicon esculentum 8572.
early blight, Lycopersicon esculentum, computer applications predictions, USA 4011.
early blight, Lycopersicon esculentum, sulfur dioxide air pollution effects on 6819.
leaves lesions, Lycopersicon esculentum, measuring techniques, computer applications, video image analysis 4924.
phytooxins, phytoxicity, cell culture, plant cells 3902.
seeds, fungicides effects on, Capsicum annuum 5832.
storage conditions, effects on, infection, Solanum tuberosum 4007.
temperature, relative humidity, effects on, infection, wound healing, solanum tuberosum 4003.
ternaria tagetica,
zinnol, production, Tagetes erecta phytotoxicity 9392.
ternaria tenuis,
spoilage effects on seeds germination, Vigna catijung 3919.
ternaric acid,
Alternaria solani, induction sesquiterpenes, tubers, Solanum tuberosum 5051.
deoxybenzoylucase BAL 31, substrate specificity 6507.
teromonas haloplanktis,
outer membranes removal methodology, factors affecting 9026.
teromonas putrefaciens,
food contamination, beef, minced meat 3841.
teroxin I,
structure, Alternaria 5650.
triuminum,
Cladosporium resinae, mycelia, role, corrosion 169.
disease control, Pseudoperonospora humuli, downy mildew, Humulus lupulus 1403.
extraction, industrial wastes, ash, Aspergillus niger, citric acid 5989.
activity testing, Aspergillus flavus spores use 9076.
triuminum hydroxide,
=hepatitis B surface antigen, vaccines, antibody response, man 783.
triuminum phosphate,
potubilization, phosphate-dissolving bacteria, acid production 5891.

- Aluminum tris (-O-ethyl phosphonate**,
disease control, Phytophthora parasitica root rot, Citrus paradisa 5065.
Amanita,
amatoxin radioimmunoassay 2954
Amanita muscaria,
effects on, growth, Picea sitchensis, Picea glauca 530.
growth, cadmium, lead, nickel, effects on 3169.
mycorrhizas, inoculation, seedlings, trees 5857.
pigments, column chromatography 2849.
Amanita phalloides,
mushroom poisoning, age effects on mortality, man 9280.
mushroom poisoning, man 178.
phallolysin, isolation, physicochemical properties 9312.
phallotoxins, resistance, mice, fibroblasts 8502.
toxins, mushroom poisoning treatment, man 5612.
Amantadine,
antiviral activity, influenza A virus 3359.
antiviral activity, influenza A virus 3361.
drug resistance, influenza A virus, plaque assay 9635.
drug resistance, production, influenza A virus, variants, methodology 1546.
injection, disease control, apple mosaic virus, Malus pumila 9500.
Amanthus caudatus,
cactus virus X isolates characterization 5019.
Amaranthus spinosus,
host plants, Phomopsis, new records, Brazil 6826.
Amatoxin,
radioimmunoassay, Amanita 2954.
Amber mutant,
Escherichia coli, polA gene, characterization, enzymes isolation 7379.
Ambrosia artemisiifolia,
stunt, bacteria, pathology, vectors 8576.
leafspot, Pseudomonas syringae pv. tagetes 5003.
Aminocillin,
antibacterial activity, Enterobacteriaceae 9636.
antibiotic sensitivity testing, relationship treatment, experimental infection, mice 9715.
American plum line pattern virus,
infectivity, Prunus 394.
Ames test,
drug conditions, toxicity levels effects on 9022.
Gyromitra esculenta gyromitrin metabolites, N-methyl-N-formyl hydrazine mutagenicity 6708.
Lactarius necator aqueous extracts 8467.
Salmonella, methodology, mutagenicity testing 845.
Salmonella typhimurium concentration, effects on mutation 9023.
Amethocaine,
antibacterial activity 7926.
antibacterial activity, Escherichia coli 6051.
Amiclin,
Streptomyces coeruleorubrae, production, isolation, characterization 1676.
Amicoumains,
Bacillus pumilus biosynthesis, antibacterial activity 2586.
Bacillus pumilus, structure 4402.
Amidase,
Arthrobacter, purification, characterization 1696.
Aminides,
derivatives, antiviral activity, respiratory syncytial virus 4316.
Amikacin,
antibacterial activity, Mycobacterium tuberculosis 2454.
antibacterial activity, Pseudomonas 7975.
antibacterial activity, Serratia marcescens 4384.
antibiotic resistance, gram-negative bacteria clinical isolates 4281.
antibiotic sensitivity testing methodology comparison, gram-negative bacilli 6090.
antibiotic sensitivity testing, Pseudomonas aeruginosa 1600.
antibiotic sensitivity testing, Pseudomonas aeruginosa, methodology comparison 9761.
antibiotic synergism, azlocillin, Pseudomonas aeruginosa 8849.
antibiotic synergism, carbenicillin, piperacillin, antibacterial activity, Pseudomonas aeruginosa 755.
bacteria antibiotic sensitivity testing 7984.
bactericidal activity, pharmacokinetics, in vitro 4386.
biosynthesis, Bacillus circulans, kanamycin A metabolism 6157.
+ ceftazidime, serum bactericidal activity, Pseudomonas aeruginosa, Klebsiella pneumoniae 3400.
+ ceftriaxone, antibiotic synergism, Pseudomonas aeruginosa 7986.
Escherichia coli, Enterobacteriaceae, Pseudomonas 2393.
+ N-formimidoyl thienamycin + gentamicin, antibiotic synergism, antibacterial activity, Streptococcus faecalis 3417.
+ N-formimidoyl thienamycin, antibacterial activity, gram-negative bacilli, Staphylococcus aureus 1660.
+ N-formimidoyl thienamycin, antibiotic synergism, Pseudomonas aeruginosa, Klebsiella pneumoniae 3394.
β-lactam antibiotics inactivation 6108.
+ β-lactam antibiotics, stability, storage 9710.
resistance, association, modification enzymatic, Pseudomonas aeruginosa, Enterobacteriaceae 840.
resistance, transposon Tn2424 mediation, Pseudomonas aeruginosa, Escherichia coli 7899.
Amine dehydrogenase,
purification, physicochemical properties, substrate specificity, subunit structure, Thiobacillus, Methylophilus methylotrophus 64.
Amine oxidase (flavin-containing),
physicochemical properties comparison, Candida utilis, Pichia pastoris 8240.
Amines,
aromatics, biodegradation, aerobic conditions 8436.
pyridoxaminephosphate oxidase activation, mechanisms, yeasts 6553.
Amino acid analysis,
phosphofructokinase subunits, Saccharomyces cerevisiae 941.
Amino acid composition,
Clostridium tetani toxins, comparison light chains, heavy chains 4906.
fructose-bisphosphate aldolase, Staphylococcus 7388.
Hordeum vulgare, association, disease resistance, powdery mildew 6857.
neurotoxins, Clostridium botulinum type E 9300.
Penicillium commune, single-cell protein 4858.

Amino acid composition, (continued)

- Penicillium commune*, single-cell protein, feeding trials, rats, rabbits 4858.
 proteinase, *Bacillus mesentericus* 5522.
 proteinase inhibitor, *Streptomyces nigrescens* 7306.
 single-cell protein, *Basidiomycetes* 9113.
 single-cell protein, *Candida tropicalis* 9109.
 single-cell protein, *Candida utilis* 9118.
 single-cell protein, *Geotrichum candidum*, *Hansenula anomala*, *Candida krusei* 8489.
 α -toxin, *Staphylococcus aureus* 2076.
 Ustilago violacea, cytochrome c, purification 2736.
- Amino acid sequence,**
 actinoidin 1641.
 adenosinetriphosphatase stabilization proteins, mitochondria, yeasts 8274.
 adenosinetriphosphatase, *Streptococcus faecalis* 1911.
 aspartate carbamoyltransferase catalytic subunits, *Escherichia coli* 6562.
Bacillus subtilis 3'-5'-cyclic-nucleotide phosphodiesterase inhibitor 7304.
Bacillus thuringiensis δ -endotoxin 4911.
 clostripain, *Clostridium histolyticum* 4636.
 core protein, Semliki Forest virus 7292.
 core protein, Sindbis virus 7293.
 cytochrome P-450, secondary structure, *Pseudomonas putida* 6491.
 elongation factor 1 α -chain, *Artemia salina*, comparison elongation factor Tu, *Escherichia coli* 4573.
 enterotoxins, *Escherichia coli* 2955.
 enterotoxins, *Escherichia coli* 4915.
 enterotoxins, *Escherichia coli* 6721.
 enterotoxins, *Escherichia coli* 6722.
Escherichia coli enterotoxins, purification, physicochemical properties, relationship pathogenicity 4910.
 exo-1,4- α -D-glucosidase, N-terminus, C-terminus, *Rhizopus* 7315.
 ferredoxin, Desulfohalobium desulfuricans 4552.
 fructose-bisphosphate aldolase active sites, *Staphylococcus aureus*,
Staphylococcus epidermidis 961.
 lactate dehydrogenase, *Lactobacillus casei* 8278.
 mercuric reductase, active sites, N-terminus, *Pseudomonas aeruginosa*, glutathione reductase (NAD(P)H), dihydrolipoamide dehydrogenase 9175.
 muramoyl-pentapeptide carboxypeptidase, *Streptomyces albus* 2788.
 nucleic acid-binding protein, bovine leukemia virus 7297.
 peptides antibiotic K-582, *Metarhizium anisopliae* 7169.
 phosphoglycerate kinase, *Saccharomyces cerevisiae* 2775.
 phosphoglycerate kinase, yeasts 6458.
 pilin, *Pseudomonas aeruginosa* 4575.
 ribosomal protein S1, statistical analysis, *Escherichia coli* 4567.
 ribosomal protein S14, *Escherichia coli* 4566.
 rN-myc, actinoidin 7165.
 α -sarcin, restrictocin, mitogillin, *Aspergillus* 114.
 sarcosine oxidase FAD binding regions, *Corynebacterium* 6539.
 streptokinase 1883.
 superoxide dismutase, *Saccharomyces cerevisiae* 27.
 N-terminal, enterotoxins, *Clostridium perfringens* 5660.
 Tremella mesenterica, tremorgen A-10, tremorgen a-13 915.
 tyrosyl-tRNA synthetase, *Bacillus stearothermophilus* 6532.

Amino acids,

- amidation, antifungal activity, fungi 2478.
 aromatic compounds, *Streptomyces* active sites, effects on levorin biosynthesis 1662.
Aspergillus niger, effects on citric acid production 5484.
 biodegradation, *Lactobacillus plantarum* 7549.
 biosynthesis, *Pseudomonas*, 4-chlorobenzoic acid media 7308.
 biosynthesis, *Rhizobium lupini*, association, tricarboxylic acid cycle metabolites, sucrose 8199.
Cucumis sativus, cucumber mosaic virus infection effects on 3066.
 derivatives, fluorene substituted, antiviral activity, murine leukemia virus 8799.
 effects on cellulose hydrolysis, cellulolytic microorganisms 7547.
 Impatiens, infection, *Plasmodium obducens*, \pm *Meloidogyne incognita* infection 2205.
 Legionella, proteinase activity analysis methodology 7239.
 levels, Allium cepa, *Sclerotium coprovorum* infection 5751.
 levels, cheese ripening, bacteria 5603.
 levels, pathogenesis, post-harvest decay, *Gliocladium roseum*, *Sclerotium roffii*, *Aspergillus niger*, apples, pears, peaches 1324.
 Malus, viruses infection effects on, nitrogen association 4974.
 media (culture), *Bacillus stearothermophilus* auxotrophs 3608.
 metabolism, *Medicago sativa*, wilt, *Corynebacterium insidiosum* 3010.
Poa pratensis, *Drechslera sorokiniana* pathogenesis, herbicides effects on 5718.
 production, bacteria, fermentation, genetic engineering 9117.
 production, *Brevibacterium lactofermentum*, *Escherichia coli*, whey 3655.
 production, hydrocarbon-degrading bacteria 8195.
 production, hydrocarbons utilization, soil microorganisms 7284.
Staphylococcus simulans, effects on extracellular enzymes biosynthesis 2792.
 stimulation, *Glomus caledonius* spore germination 4169.
 uptake, correlation, drug resistance, *Schizosaccharomyces pombe* 8748.
- Amino sugars,**
 cell walls, bacteria, gas chromatography 9877.
- α -Amino-caprolactam racemase,**
 purification, characterization, *Achromobacter* abae 1890.
- D-Amino-acid dehydrogenase,**
 solubilization, kinetics, cell membranes, *Escherichia coli* 4694.
- 3-Amino-demethoxyfortimicin A,**
 antibacterial activity 6199.
- 7p-(2-(5-Amino-1,2,4-thiadiazol-3-yl)-2-oxyminoacetimido)cephalosporin,**
 derivatives, synthesis, antimicrobial activity 9750.
- 4-Amino-1,2,4-triazole hydrochloride,**
 inhibition, nitrification, ammonification, soil microorganisms 9624.
- 5-Amino-2-(dimethylaminoethyl)-benzo-(de)-isoquinolin-1,3-dione,**
 antiviral activity, herpes simplex virus 2, adenovirus (human) 5 3358.
- 2-Amino-3-D-methyl-2-deoxyfortimicin A,**
 antibacterial activity 6199.
- 4-Amino-3,5-dichlorobenzoic acid,**
 bacteria, dehalogenation, lakes, sediments 6648.
- 2-Amino-5-(2-N-methyl-sulfamidophenyl)-1,3,4-thiadiazole,**
 derivatives, antiviral activity 9693.
- 2-Amino-5-(2-sulfamoylphenyl)-1,3,4-thiadiazole,**
 structure-activity relationships, antiviral activity 1573.
- 2-Amino-6-O-(2-amino-2-deoxy- β -D-glucopyranosyl)-2-deoxy-D-glucose,**
 hydrophobicity regions, endotoxins, *Bordetella pertussis* 7632.
- p-Aminocetophenone,**
 concentration, fungi mycelia, relationship levorin biosynthesis 7171.
- 2-(Aminoacyl)aminopyrazine,**
 derivatives, antimicrobial activity 7962.
- Aminoacyl-cabazole,**
 derivatives, synthesis, antibacterial activity 3330.
- Aminoacyl-tRNA hydrolase,**
Escherichia coli, dissociation, ribosomes, erythromycin, carbamycin, spiramycin, effects on 1630.
- Aminoacylation,**
 lysinomicin derivatives 1684.
- p-Aminoazobenzene,**
 biodegradation, *Bacillus subtilis* 2006.
- 4-Aminobenzenesulfonamide,**
 binding 2,4-diaminopyrimidines, antibacterial activity 7083.
- p-Aminobenzoic acid,**
 effects on citric acid production, *Aspergillus niger* 5468.
 effects on *Streptomyces levoris* levorin biosynthesis 778.
- Aminobenzylpenicillin,**
 derivatives, antibacterial activity 6153.
- α -Aminobutyric acid,**
 detection, cell surface, *Staphylococcus aureus* 1834.
- γ -Aminobutyric acid,**
 formation, glutamate decarboxylase, mechanisms, stereospecificity, *Escherichia coli* 6563.
- ϵ -Aminocaproate,**
Corynebacterium aurantiacum metabolism variants 3790.
- 1-Aminocyclopropane-1-carboxylate synthase,**
 Lycopersicon esculentum, *Streptomyces ginsenos*, sinetungin, inhibition, ripening 7593.
- Aminodisaccharides,**
 antibacterial activity, gram-negative bacteria 8751.
- S-(2-Aminoethyl)-L-cysteine,**
 resistant mutant, *Streptomyces clavuligerus*, association, β -lactam antibiotics biosynthesis, aspartate kinase regulation 8809.
- resistant mutant, *Bacillus subtilis*, L-lysine excretion 9122.
- (2-Aminoethyl)phosphonate-pyruvate aminotransferase,**
 purification, characterization, *Pseudomonas aeruginosa* 7405.
- Aminoglycoside acetyltransferase,**
 kinetics, mechanisms, *Staphylococcus aureus* R factor RPAL 8271.
- Aminoglycoside antibiotics,**
 agar diffusion test, media (culture) 6102.
 antibacterial activity, *Pseudomonas* 7975.
 antibacterial activity, *Pseudomonas aeruginosa* 741.
 antibacterial activity, *Susacra* semen bacteria 715.
 antibiotic resistance, bacteria isolates, hospitals 8732.
 antibiotic resistance, clinical isolates, gram-negative bacilli 8726.
 antibiotic resistance, enzymes, *Streptococcus faecalis* 3291.
 antibiotic resistance, plasmids, *Shigella sonnei* 4278.
 antibiotic resistance, *Staphylococcus*, plasmids transfer 7042.
 antibiotic resistance, *Staphylococcus*, plasmids transfer 7046.
 antibiotic resistance, *Streptococcus* group D 6024.
 antibiotic resistance, *Streptomyces tenebrarius* 1539.
 antibiotic sensitivity testing, clinical isolates, bacteria 7132.
 antibiotic sensitivity testing, Enterobacteriaceae, *Pseudomonas aeruginosa*, Serratia 4351.
 antibiotic sensitivity testing, *Staphylococcus aureus* 3378.
 antibiotic sensitivity testing, *Staphylococcus*, clinical isolates 6105.
 antibiotic sensitivity testing, *Staphylococcus* clinical isolates 9734.
 antibiotic sensitivity testing, *Yersinia enterocolitica*, *Bacteroides corrodens*, *Streptococcus pneumoniae* 6089.
 antibiotic synergism, azlocillin, *Pseudomonas aeruginosa* 8849.
 antibiotic synergism, ceftiozime, gram-negative bacilli, *Staphylococcus* 2531.
 antibiotic synergism, semisynthetic penicillins, antibacterial activity, Enterobacteriaceae 7125.
 assays, body fluids 9724.
 bacteria antibiotic resistance, clinical aspects, dosage frequency effects on 6002.
 bacteria antibiotic resistance, epidemiology, plasmids association, France 6006.
 bacteria antibiotic resistance, incidence, Switzerland, clinical surveys 6003.
 bacteria antibiotic resistance, role enzymes inactivation mechanisms 6005.
 bactericidal activity, *Staphylococcus aureus*, phagocytosis, phagolysosomes, pH intracellular levels 9733.
 Campylobacter fetus subsp. jejuni drug sensitivity testing 4292.
 +carbenicillin, antibacterial activity, *Pseudomonas aeruginosa* 1619.
 +cefusidin, antibacterial activity, *Pseudomonas aeruginosa*, Serratia marcescens 6093.
 +ceftriaxone, antibiotic synergism, antibiotic antagonism, *Pseudomonas aeruginosa* 7366.
 +cephalosporins, antibacterial activity, non-fermentative gram-negative bacteria 1607.
 +cephalosporins, antibiotic synergism, antibacterial activity, *Pseudomonas*, *Escherichia coli* 736.
 clinical aspects, bacteria antibiotic resistance, conferences 6366.
 disc-diffusion test, streptococcus group D 2509.
Escherichia coli, cross-resistance, nitrofurans 7045.
Escherichia coli, effects on, protein biosynthesis, RNA biosynthesis 6094.
 inhibition, protein biosynthesis, *Escherichia coli* 2558.
 β -lactam antibiotics inactivation 6108.
 + β -lactam antibiotics, stability, storage 9710.
 β -lactam antibiotics, synergism, therapeutic applications, antibacterial activity reversal 6051.
 modification enzymatic, association, antibiotic resistance, *Pseudomonas aeruginosa*, Enterobacteriaceae 640.
 Nocardia, antibiotic sensitivity testing 2517.
 production, Micromonospora, media (selective)+gentamicin screening 6107.
 purification, *Escherichia coli* bioassays, acetyl-CoA 3415.
 resistance, association, *Pseudomonas aeruginosa* transposon Tn2401 identification 7050.
 susceptibility, *Staphylococcus aureus*, gentamicin resistance 2413.
 synthesis, antibacterial activity, structure-activity relationships 9717.
 titration methodology 8821.
- antibacterial activity determination methodology 8810.

- Aminoglycoside phosphotransferase**, kinetics, mechanisms, *Staphylococcus aureus* R factor RPAL 8271
- Aminoglycoside-2-O-adenylyltransferase**, bacteria, 7-hydroxytropolone inhibition, association, antibiotic resistance 652
- 7-hydroxytropolone inhibition, association, antibiotic resistance 652.
- 6-Aminohexanoic acid**, bacteria, biodegradation 3783.
- 5-Aminolevulinic acid**, biosynthetic mechanisms, *Chlorobium*, *Chloroflexus*, *Acetivibrio*, *Rhodospseudomonas* 8239.
- L-2-Amino-3-phenylpropionic acid**, inhibition, phytoalexins; Glycine max, effects on, disease resistance. *Phytophthora megasperma* f.sp. *glycinea* 3907.
- 6-Aminopenicillanic acid**, fluorescence assays 3406.
- Aminopeptidase**, active sites characterization, chemical modification, *Aeromonas proteolytica* 956. *Aeromonas hydrophila* subsp. *proteolytica*, active sites, characterization 8255. *Aeromonas proteolytica* subsp. *proteolytica*, nickel(II), copper(II), substitution effects on activity 8277. assays, serum, man, use leucine dehydrogenase, *Bacillus sphaericus*, *Bacillus megaterium* 6308. *Shigella*, detection methodology 871.
- Aminopeptidase Co**, *Saccharomyces cerevisiae*, characterization 1923.
- 1-Aminopyrene**, 1-nitropyrene transformation, anaerobic bacteria, intestinal microflora, man 2024.
- 2-(2-Aminothiazol-4-yl)-2-sulfacetate cephalosporins**, antibacterial activity, *Pseudomonas aeruginosa*, gram-negative bacteria 7991.
- Ampirophos methyl**, specificity, cell cycle, *Schizosaccharomyces pombe* 690.
- Ampirubicin**, structure, mass spectroscopy 7177.
- Ammonia**, antifungal activity, *Phymatotrichum omnivorum*, mycelia, sclerotia 696. antifungal activity, wheat post-harvest decay 441. assimilation, nodules, *Trigonella foenum-graecum*, bacteria, nitrification fixation 3242. assimilation, role, glutamate synthase, association, nitrogen fixation, *Leguminosae* 5939. detoxification, ochratoxin A, grain 2063. effects on soil microorganisms fungi, growth, spore germination 2349. production, microorganisms, immobilized cells, reviews 6607. removal, facultative bacteria, wastewater treatment 5331. role, viruses inactivation, heat effects on 7945.
- Ammoniation**, *Gossypium hirsutum* seeds, effects on cow's milk aflatoxin M1, cattle feeding regimes 2945.
- Ammonification**, bacteria, USSR soil 7808. nitrifying bacteria, soil pollution, heavy metals effects on 4238. soil microorganisms, inhibition, carbon disulfide, 4-amino-1,2,4-triazole hydrochloride, 2-chloro-6-(trichloromethyl)-pyridine 9624.
- Ammonifying bacteria**, ammonium fermentation, drinking water 9817. seasonal variations, association, *Fagus* forests, soil nitrogen mineralization 4137. soil amendment, fertilizers, manure, redox potential, paddy fields, *Oryza sativa* 9623.
- Ammonium**, aspartate kinase activity, *Escherichia coli* 6536. concentration, *Aureobasidium pullulans* batch culture, association, polysaccharides production 6570. effects on nitrogen fixation, roots nodules, *Alnus incana* 3220. formation, ammonifying bacteria, drinking water 9817. fertilizer applications effects on *Triticum aestivum* take-all 1331. glutamate dehydrogenase (NADP⁺) activation, *Neurospora crassa* 4620. nitrite, continuous culture methodology, *Mycobacterium avium* 8114. oxidation, *Nitrosomonas europaea*, immobilized cells 9063. stimulation, *Streptomyces griseus*, streptomycin biosynthesis 7150.
- Ammonium hydroxide**, detoxification, aflatoxin B1, mutagenicity, toxicity 278.
- Ammonium molybdate**, + phosphorus tungstic acid, preservation viruses antigenic characteristics, storage 7226.
- Ammonium nitrate**, tolerance, *Rhizobium trifolii*, effects on nodulation 7855.
- Ammonium sulfate**, effects on, root rot, *Phytophthora cinnamomi*, *Persea indica* 2147. soil amendment, relationship, soil nitrification 7834.
- Amniotic fluid**, antibacterial activity, *Staphylococcus epidermidis* 6042. *Streptococcus* group B antigens detection, latex agglutination, monkeys 9938.
- Amoeba**, phagocytosis, fungi, take-all, *Triticum aestivum*, soil microorganisms 4223.
- Amorcia rusticana**, beet curly top virus infection 1313. wilt, *Verticillium dahliae* interaction pectin-degrading bacteria, *Fusarium* 1253.
- Amorphophallus konjac**, leaf blight, *Pseudomonas pseudoalcaligenes* subsp. *konjaci*, pathogenesis 7716.
- Amoxicillin**, antibiotic resistance, *Streptococcus sanguis* oral cavity isolates, relationship dental caries prophylaxis 8734. antibiotic sensitivity testing, *Streptococcus* 9718. + clavulanic acid, antibiotic sensitivity testing, *Mycobacterium fortuitum* 7141. + clavulanic acid antibiotic synergism, antibacterial activity, *Mycobacterium tuberculosis* 8845. + clavulanic acid, high-performance liquid chromatography 5252. + clavulanic acid, antibacterial activity, *Enterobacteriaceae* 745. exposure, association, *Escherichia coli* growth curves 7054. + fosfomicin, sensitivity, *Staphylococcus aureus*, *Escherichia coli* 8040.
- + clavulanic acid, β -lactamase activity, bacteria 3411. + clavulanic acid, *Enterobacter cloacae* resistance 4275.
- + clavulanic acid, *Enterobacter cloacae* resistance 4276.
- AMP**, affinity, 6-phosphofructokinase, fructose-2,6-diphosphate stimulation, yeasts 2732. biosynthesis, *Molluscus* 9220. inhibition lactate dehydrogenase, *Phycomyces blakesleeana* 1905. inhibition protein kinase phosphorylation fructose-bisphosphate, yeasts 8283. oxidative phosphorylation, *Candida boidinii*, ATP biosynthesis 1031.
- Ampelomyces quisqualis**, biological control, *Sphaerotheca fuliginea*, powdery mildew, *Cucumis sativus* 2275. detoxification, triadimefon 6883. polysaccharides degradation enzymes detection 8319. tolerance, antifungal activity, triadimefon, pyrazophos, ditaimfos, iprodione 1401.
- Ampolihole**, effects on, biological properties, exotoxins, *Streptococcus pyogenes* 2084.
- Ampomycin**, inhibition, phospho-N-acetyl-muramoyl-pentapeptide-transferase, role, peptidoglycans biosynthesis, *Bacillus megaterium* 1561.
- Ampotericin B**, antibiotic resistance, *Candida* 3308. antibiotic sensitivity testing, yeasts 2502. antifungal activity, cell walls, *Candida albicans* 2477. antifungal activity, *Curvularia lunata* var. *aeria* 7939. antifungal activity, *Dematiaceae* 7929. antifungal activity, plasma membranes, freeze-fracture, *Candida albicans* 8009. antifungal activity, *Sporothrix schenckii*, temperature effects on 1569. antifungal agents, interaction, antifungal activity 1567. biosynthesis, *Streptomyces nodosus*, mycelia growth 6181. + butylated hydroxyanisole, antifungal activity, *Candida albicans* 6175. + 9-(2-hydroxyethoxy)methylguanine, antiviral activity, pseudorabies virus infection, BHK-21 cells 3351. + ketoconazole, antibiotic resistance, *Candida albicans* 3307. + phenothiazines, antifungal activity, *Candida* 4391. physicochemical properties, antibacterial activity 1634. \pm polyene antibiotics, \pm ketoconazole, \pm miconazole, antifungal activity, *Candida albicans* 1633.
- Ampicillin**, + 6-acetylmethylenepenicillanic acid, antibacterial activity, *Escherichia coli* 3405. antibacterial activity, *Enterobacteriaceae* 2552. antibacterial activity, *Escherichia coli*, *Streptococcus faecalis* 739. antibacterial activity, *Haemophilus influenzae* 7981. antibacterial activity, *Haemophilus influenzae*, gram-negative bacteria 6119. antibiotic resistance development, bacteria 6020. antibiotic resistance, *Enterobacteriaceae*, *Pseudomonas* 2393. antibiotic resistance, *Escherichia coli*, relationship β -lactamase activity 7028. antibiotic resistance, *Escherichia coli*, urinary tract clinical isolates 7034. antibiotic resistance, *Haemophilus influenzae*, relationship, biotyping 7048. antibiotic resistance, R factors, *Salmonella typhimurium* 646. antibiotic resistance, role β -lactamase, *Haemophilus influenzae* 2400. antibiotic resistance, *Salmonella* isolates, Netherlands, incidence 5161. antibiotic sensitivity testing, bacteria 6111. antibiotic sensitivity testing, clinical isolates, bacteria 7132. antibiotic sensitivity testing, *Haemophilus influenzae*, *Streptococcus pneumoniae* 7985. antibiotic sensitivity testing methodology comparison, gram-negative bacilli 6090. antibiotic sensitivity testing, *Shigella*, antibiotic resistance transfer, Italy 6829. antibiotic sensitivity testing, urease positive bacteria 751. bacteria antibiotic sensitivity testing 7964. bacteria urinary tract isolates, antibiotic sensitivity testing, antibiotic resistance 4287. Bordetella pertussis, drug sensitivity testing 7133. + cloxacillin, antibacterial activity, gram-negative bacteria, β -lactamase 1610. comparison, cefotetan antibacterial activity 6134. comparison, chloramphenicol, cefamandole, bactericidal activity, *Haemophilus influenzae* 3418. degradation kinetics, association, furural, aqueous solutions 5251. *Escherichia coli* susceptibility, antibiotics pretreatment 7061. exposure, association, *Escherichia coli* growth curves 7054. \pm gentamicin, antibacterial activity, *Streptococcus faecalis*, *Streptococcus faecium* 7982. + β -lactam antibiotics antibacterial activity 3314. β -lactamase, *Haemophilus influenzae* type b, clinical isolates 653. + mecillinam, antibiotic synergism, antibacterial activity, gram-negative bacteria 9758. *Mycobacterium* antibiotic sensitivity testing 7996. *Neisseria gonorrhoeae* antibiotic sensitivity testing 3382. resistance, association, cadmium sensitivity, *Escherichia coli* plasmids 1536. resistance, bacteria, septicemia, man 645. resistance, *Escherichia coli*, clinical isolates, British Isles 1540. resistance, *Haemophilus influenzae* otitis media, man 847. resistance, population studies, *Escherichia coli*, *Enterobacter cloacae* 629. *Salmonella* clinical isolates, antibiotic sensitivity testing 6112. spectrophotometry 730. stabilization, aqueous solutions, association, benzaldehyde 5253. susceptibility, *Escherichia coli*, statistical analysis methodology 1795. temocillin, antibacterial activity *Haemophilus influenzae* 6155. tobramycin, gentamicin, antibacterial activity, *Proteus*, *Pseudomonas aeruginosa* 7967.
- Amritodus atkinsoni**, disease transmission, fungi, *Mangifera indica* 3022.
- m-AMSA**, misonidazole, effects on radiosensitization, toxicity, *Escherichia coli* 666.
- Amycelin**, *Streptomyces coeruleorantiacus* sp. nov., biosynthesis 2588.
- Amyeloida transelella**, biological control, heat resistance, disease resistance, heat inactivation, calicivirus 5549.
- Amygdalum commune**, gummosis, fungi etiology 3030.

Amylase,

assays, buffers, *Chionochloa rigida* grasslands soil, New Zealand 9564.
assays, *Chionochloa rigida* grasslands soil, pH effects on, New Zealand 9565.
Bacillus subtilis α -amylase, immobilized enzymes, activity association,
non-linearly 9134.
biosynthesis, *Vibrio parahaemolyticus*, peptones effects on 1942.

 α -Amylase,

activity determination, methodology, bacteria 7401.
activity, pesticides effects on, soils (organic) 3247.
Aspergillus oryzae, biosynthesis, factors affecting 8316.
Bacillus circulans, purification, use, maltotetraose production 80.
Bacillus licheniformis, production, carbon sources, oil cake 1850.
Bacillus megaterium, characterization 1910.
Bacillus subtilis, immobilization, use, Sepharose-6MB 9147.
Bacillus subtilis, immobilized enzymes, activity, association, starch,
non-linearly 9134.
bacteria, use, starch fermentation, glucose biosynthesis 4699.
biosynthesis, *Bacillus licheniformis* membranes ribosomes 8295.
biosynthesis, thermophilic microorganisms, fungi, bacteria, yeasts 1913.
Calvatia gigantea, production, characterization, culture methodology 2772.
chain immobilized enzymes, *Aspergillus awamori* var. *kawachi*, starch
biodegradation activity 106.
diethyl pyrocarbonate chemical modification, *Aspergillus oryzae* 1862.
extraction, soil 4215.
glycine, association, enhancement, *Bacillus amyloliquefaciens*, production 8296.
growth inhibition, *Legionella pneumophila* 7247.
immobilized enzymes, *Aspergillus awamori* var. *kawachi*, glucose production 8305.
immobilized enzymes, *Aspergillus oryzae*, *Bacillus subtilis* 49.
immobilized enzymes, yeasts 2765.
poly(anions) inhibition kinetics, fluorescence, *Bacillus subtilis* 79.
production, *Bacillus subtilis*, continuous culture 2794.
production, growth rate, *Bacillus subtilis* 2795.
production, phytopathogenic fungi 6404.
purification, characterization, α -amylase inhibitor inhibition, *Bacillus subtilis* 4629.
purification, characterization, *Bacillus licheniformis* 7375.
purification, characterization, *Paeclomycetes* 6455.
purification, characterization, *Pseudomonas stutzeri* 2771.
purification, characterization, starch hydrolysis, *Bacillus circulans* 6520.
purification, kinetics, chemical composition, *Bacillus subtilis* 9143.
role antibiotics biosynthesis, actinomycetes 7123.
Thermoactinomyces vulgaris, activity 1939.
Thermoactinomyces vulgaris, purification, characterization 1919.
yeasts, production 3691.

 β -Amylase,

Bacillus cereus, purification, characterization 8301.
Bacillus megaterium, characterization 1910.
biosynthesis, bacteria, growth, fractionation, media methodology 5428.
production, *Bacillus cereus* 7317.

Amylase inhibitor,

multiple forms, *Streptomyces*, production, characterization 8303.
 α -Amylase inhibitor,
purification, characterization, *Streptomyces corchorusii* 6387.
purification, characterization, *Streptomyces griseosporus* 6515.
Triticum, inhibition α -amylase, *Bacillus subtilis* 4629.

 β -Amylase inhibitor,

isolation, characterization, *Streptomyces* 6523.

Amylovorin,

Erwinia amylovora, host specificity, *Cotoneaster pannosa*, spiraea vanhouttei,
Malus pumila 9371.

 β -Amyrin,

Aspergillus nidulans, isolation, characterization 3735.

Anacardium occidentale,

powdery mildew, *Oidium anacardii* infection, pathogenesis 421.

Anacytis,

5-aminolevulinic acid biosynthesis mechanisms 8209.

Anaerobic bacteria,

antibacterial activity, antibiotic SO 26,917 8039.
antibacterial activity, cefotetan 4345.
antibacterial activity, cephalosporins, ceftazoxime 2535.
antibacterial activity, lincomycins, metronidazole 5174.
antibacterial activity, moxalactam 5270.
antibacterial activity, piperacillin 9271.
antibacterial activity, sulfonamides, +bromodiprim, +metoprim 3320.
antibiotic sensitivity testing 9270.
antibiotic sensitivity testing, cephalosporins 7136.
antibiotic sensitivity testing, clinical microbiology 4328.
antibiotic sensitivity testing methodology 1602.
antibiotic sensitivity testing, reviews 2519.
bacteremia, blood isolation methodology, centrifugation +filtration 9946.
bile acids hydroxylation 2832.
biodegradation, cyanuric acid, cysteine, atrazine 2900.
cattle feces fermentation, hydrocarbons production 5138.
cefotaxime, moxalactam, antibacterial activity comparison, antimicrobial agents
6126.
cefesulodin-3: cefoxitin, antibacterial activity 6127.
clinical isolates, incubation, anaerobic environments 2680.
compound U-57303C antibacterial activity 4379.
corn +animal wastes silage, fermentation, biochemical characteristics 4868.
crop rotation, fertilization, association, catalase activity, soil, USA 2382.
digestion (anaerobic), petroleum effluents, bioreactors 5287.
drug sensitivity testing, antibiotic sensitivity testing, reviews 6113.
emulsifiers, antibacterial activity, use preservatives,
fermentation, chemical extraction, organic compounds, toxicity 8778.
fouling organisms, antibacterial activity, antifouling substances, metals, sea
water 151.
gastrointestinal tract, decontamination, use, antibiotics, man, in vitro 8812.
isolation, methodology 9943.
infection, cephadrine, treatment, in vitro antibacterial activity 676.
infection, diagnosis, use, clinical isolates metabolism acids levels 894.
intestinal microflora, man 1-nitropyrene transformation 2024.
intestinal microflora, salinomycin administration effects on pigs 5624.
isolation, children, blood culture methodology 2683.
 β -lactamase detection methodology 9037.
 β -lactamase production, association β -lactam antibiotics susceptibility
5199.

Anaerobic bacteria, (continued)

mezlocillin antibacterial activity 6149.
oral microflora, clinical isolates, antibiotics activity concentrations 8814.
phenol biodegradation, waste disposal sites, British Isles 3799.
recovery, swabs transport systems 6333.
rumen, storage, viability 1802.
sewage treatment, digestion (anaerobic), association, temperature 5289.
spores, contamination, milk 4829.
survival, swabs transport system, temperature association 6334.
susceptibility, antibiotics, animal isolates, cattle, pneumonia 7987.
susceptibility, cefmenoxime, cefotetan, N-formimidoyl thienamycin 5194.
swabs transport methodology 2685.
indazole, antibacterial activity 3312.

Anaerobic conditions,

bioreactors, organic compounds +methanol loading, degradation association 8940.
column chromatography +detergents, methodology, fractionation *Pseudomonas*
hydrocarbon acid production enzymes 4505.
comparison, aerobic conditions, bacteria, culture tanks 9883.
culture methodology, *Streptococcus group A*, infection diagnosis, man 2696.
dyes biodegradation 8423.
hydrogen oxidation, hydrogenase, soil 5917.
lignins biodegradation, microorganisms soil isolates, Egypt, Arab Rep. 8428.
media (culture), *Mycoplasma hyosynoviae*, growth 2668.
methanogenic bacteria, cell culture methodology 3549.
Peptococcus dentrificans production ulquinone-10 5551.
per-L biodegradation, C/N ratios 9264.
sewage effluents, lagoons, *Thiopia rosea* flocculation 8064.
soil microorganisms, urea hydrolysis 5109.
Streptococcus group A isolation 9962.

Anaerobic digestion,

cellulose, methanogenic bacteria, methanogenesis 3258.

Anaerobic environments,

incubation, anaerobic bacteria, clinical isolates 2680.

Anaerobic microorganisms,

antibiotic sensitivity testing, methodology 1593.

Anaerobic respiration,

digestion, fruits, vegetables 4843.

filters, wastewater treatment, coal gases 8952.

Anaerobic respiration,

microorganisms, wastewater treatment 5311.

microorganisms, wastewater treatment, whey use 5325.

Anaerobiosis,

conditions, soil, analysis, nitrate reduction, nitrite reduction 7845

Anaesthetics,

antibacterial activity, *Escherichia coli* 7926.

Analizers,

disaccharides, fungi immobilized enzymes 7342.

fermentation, glucose, yeasts, methodology 4545.

Anaplasma marginale,

proteins characterization, infected erythrocytes 6379.

Antitoxemia,

Rhizoctonia solani, identification, media (selective) 9989.

Rhizoctonia solani, soil population levels, association, *Arachis hypogaea*, USA,
Texas, USA, New Mexico 5094.

Anatidae,

Chlamydia psittaci isolation, antibiotic resistance 8741.

Anan potato latent virus,

transmission (seed), *Solanum tuberosum*, symptoms 406.

Andicidin,

biosynthesis, genes, cloning, *Streptomyces* 8032.

Andropogon gerardi,

leafspot 1174.

Andropogon scoparius,

leafspot 1174.

4-Androstene-3,17-dione,

hydroxylation, immobilized cells, *Corynebacterium* 6565.

Anesthesia,

medical personnel, bacteria contamination 7205.

Anesthetics,

antibacterial activity relationship, cornea ulcers treatment, man 9676.

antibacterial activity, structure-activity relationships, *Escherichia coli* 6051.

Anguillospora longissima,

cellulose decomposition 2903.

Anguillospora pseudolongissima,

biodegradation, *Populus tremuloides*, leaf litter 8045.

2,2'-Anhydride-1- β -D-arabinofuranosylthymine,
crystal structure, antiviral activity, herpes simplex virus 7101.

Anilazine,

disease control, *Acremonium crocogenicum*, leafspot, *Syngonium podophyllum* 1423.

disease control, leafspot, *Apium graveolens* 4098.

effects on, growth, respiration, enzymatic activity, *Escherichia coli* 5168.

Aniline,

biodegradation, aerobic conditions 8436.

biodegradation, *Rhodococcus* 7556.

derivatives conversion, diazonium salts biosynthesis, *Escherichia coli* 3741.

utilization, *Rhodococcus erythropolis*, *Pseudomonas maltophilia* 3786.

1-Anilino-8-naphthalenesulfonic acid,

interaction UDP-glucose 4-epimerase, fluorescence, *Saccharomyces fragilis* 5494.

Animal models,

immunogenicity, *Leptospira interrogans* vaccines 3455.

mice, toxicity, sewage sludge, man 3489.

nuclear polyhedrosis virus safety studies, biological control, insects 4710.

rabbits, immunogenicity, *Leptospira interrogans* vaccines 3455.

rabbits, pencycuron toxicity, *Mammalia* 3155.

rats, appetite, relationship, mushrooms 3815.

rats, dental caries prophylaxis, use, fluoride varnishes 8994.

Animal wastes,

cattle, slurries, *Escherichia coli*, *Salmonella typhimurium*, survival, isolation,
drug resistance 2617.

+corn silage, fermentation, biochemical characteristics, microorganisms 4868.

fermentation, microorganisms, methane gas production, antibiotics effects on
1039.

hydrolysis, products, inhibition, yeasts, growth 4305.

lagoons, waste treatment, bacteria population dynamics 4434.

pigs, digestion (anaerobic), *Clostridium*, *Bacillus* 5301.

pigs, digestion (anaerobic), substrates retention, relationship, bacteria levels
9808.

Animal wastes, (continued)

- pigs, pH, temperature, effects on, *Salmonella typhimurium*, *Escherichia coli*, growth 8954.
soil amendment, relationship, soil nitrification 7834.
waste treatment, microorganisms association biodegradation 2616.
- Animals,**
aflatoxicosis, interaction, metals, dietary intake, reviews 4900.
aflatoxicosis, interaction vitamins nutrition 4899.
carbohydrates digestibility, fungi, yeasts, feeding trials 3853.
carcasses, meat, food contamination, *Campylobacter fetus* subsp. jejuni 1090.
correlation, *Salmonella typhimurium*, hydrazine derivatives, *Basidiomycetes* metabolism, toxicity, mutagenicity 1095.
feces, association, fertilizers, *Salmonella* incidence 2637.
feeds, contamination, bacteria, fungi, mycotoxins, conferences 5455.
feeds, fungi, mycotoxins, food contamination, fungicides use control 3865.
feeds, *Trichoderma reesei* protein biosynthesis, use, sugar beets industrial wastes 8493.
food contamination, *Salmonella* isolation, culture methodology 1088.
grazing, lupinosis, relationship, *Lupinus fungi* infection 5005.
leptospirosis, diagnosis methodology 2662.
pathogenicity, biological control microorganisms 4711.
pleural fluid, synovial fluid, bacteria recovery, media methodology 3609.
Pseudomonella isolates, serotyping 5627.
yeasts feeds production, nitrate-reducing bacteria contamination 1085.

***Ar*-Anisidine,**

- biodegradation, aerobic conditions 8436.
- Annona squamosa,**
plant extracts, chemical control, *Nephotettix virescens*, vectors, rice tungro virus 7737.
- Annual rings,**
Ulmus americana, isolation, *Ceratocystis ulmi*, USA, California 2310.
- Anopheles albimanus,**
biological control, larvicides, factors affecting, *Bacillus thuringiensis* 8380.
- Anopheles atroparvus,**
biological control, *Bacillus thuringiensis* 4712.
- Anopheles freeborni,**
biological control, *Lagenidium giganteum*, survival, overwintering, paddy fields 6615.
- Anopheles gambiae,**
larvae, biological control, *Bacillus sphaericus* 6611.
- Anopheles quadrimaculatus,**
biological control, *Bacillus thuringiensis*, paddy fields, *Oryza sativa* 6601.
biological control, larvicides, factors affecting, *Anopheles quadrimaculatus* 8380.
- Anopheles stephensi,**
geographical variations, susceptibility, endotoxins, *Bacillus thuringiensis*, India 293.
larvae, biological control, *Bacillus sphaericus* 6611.
larvae, biological control, *Bacillus sphaericus*, heat inactivation 6612.
Metarrhizium anisopliae, conidia, viability, temperature, relative humidity, effects on, virulence 7478.
- Ansemitticin,**
biosynthesis, *Nocardia* 4422.
- Ansestrina,**
Streptomyces collinus, components, physicochemical properties 7174.
- Antagonism,**
Azotobacter, antifungal activity, fungi 5933.
Cercospora kikuchi, association, *Phomopsis*, in vitro 4939.
Gramineae footrot pathogens, *Pseudocercospora* helminthosporoides, *Fusarium*, *Rhizoctonia cerealis* 1148.
Rhizoctonia solani infection, *Solanum tuberosum* 9429.
role, acetic acid, lactic acid, association, metronidazole antibacterial activity, *Trichomonas vaginalis* 7090.
saprophytes, soil pH, soil temperature, fungicides, herbicides, soil moisture, *Fusarium* odum 5694.
Trichoderma harzianum, *Sclerotium rolfsii* sclerotia, factors affecting, soil 9570.

Antagonists,

- bacteria, interaction, *Gaeumannomyces graminis* var. *tritici*, clays effects on 4199.
Chaetomium globosum, screening, biological control, *Venturia inaequalis*, scab 3740.
soil microorganisms, *Rhizobium japonicum* 576.
- Antartice,**
microorganisms, ecophysiology, rocks habitat 9548.
soil, yeasts, algae, bacteria 1475.
tundra peat, freeze-thawing effects on soil microorganisms 580.
yeasts, media (isolation) 3626.
- Antirrhoea,**
Coffea, Cuba 2189.
Colletotrichum fragariae, disease resistance, screening, *Fragaria* 1258.
Colletotrichum gloeosporioides, Coffea, Cuba 3910.
Colletotrichum gloeosporioides, cuttase, activity, *Carica papaya*, pesticides (organophosphorus), effects on 8563.
Colletotrichum gloeosporioides, *Fragaria* 9425.
Colletotrichum gloeosporioides, pathogenesis, electron microscopy, *Carica papaya* 8564.
Colletotrichum graminicola, *Avena sativa* 7670.
Colletotrichum graminicola, *Zea mays*, *Orthoptera* role 369.
Colletotrichum lindemuthianum, disease resistance, phytoalexins, Phaseolus vulgaris 1360.
Colletotrichum lindemuthianum, epidemiology, Phaseolus vulgaris, Canada 4933.
Colletotrichum lindemuthianum, Phaseolus vulgaris disease resistance 5815.
Colletotrichum trifolii, disease resistance, *Medicago sativa* 5046.
Colletotrichum truncatum, effects on, yield, *Glycine max* 1137.
Gloeosporium theae-sinensis, *Camelia sinensis* 4014.
Gnomonia leptostyla, genetic analysis, selection, disease resistance, *Juglans nigra* 5874.
Marsdenia juglandis penetration, leaves, *Juglans nigra* 3029.
Persea gratissima, disease control, prochloraz 6833.
- Anthracycline antibiotics,**
biosynthesis, Streptomyces coeruleorubidus, Streptomyces galilaeus mutants 5540.
biosynthesis, structure, Streptomyces galilaeus mutants 5539.
dechlorinib, antibacterial activity, gram-positive bacteria 6220.

Anthracycline antibiotics, (continued)

- dechlorinib, sugars components, structure 6221.
N-formyl-13-dihydrocarbamoyl biosynthesis, Actinomycetes, isolation, structure 5542.
inactivation, phase Φ X174, association DNA binding 1582.
isolation, characterization, Streptomyces galilaeus mutants 5538.
titration precreation methodology 6231.
- production, Streptomyces griseus, differentiation regulators, screening projects 3602.
- Anthracyclones,**
transformation, Streptomyces coeruleorubidus, Streptomyces galilaeus 782.
- Anthraquinone,**
hacuumaculation, Aspergillus parasiticus mutants, column chromatography 5649.
Streptomyces galilaeus mutants biosynthesis 2823.
- Antibacterial activity,**
acylureidopenicillins, antibiotic antagonism, cephalosporins, in vitro 6144.
adiposin, oligosaccharides inhibition 2569.
Allium sativum, *Coxiella burnetii* infection, chickens 668.
Allium sativum extracts, *Bacillus cereus* 1549.
amikacin, gentamicin, antibiotic synergism, \pm carbencillin, \pm piperacillin, *Pseudomonas aeruginosa* 755.
amikacin, *Mycobacterium tuberculosis* 2454.
amphotericin B, physicochemical properties 1634.
analysis, methodology, cephalothin, gentamicin, antibiotic synergism, *Klebsiella pneumoniae* 6123.
antibiotic AT-265 1672.
antibiotic SM-1652 734.
antibiotic synergism, daunomycin transformation, Streptomyces erythromyces sp. nov. 675.
antibiotic T-1982 735.
antibiotic 315 2570.
antibiotics, aerobic bacteria, temperature effects on 1603.
antibiotics, drugs, measurements 722.
antibiotics, *Pseudomonas aeruginosa* 6128.
antibiotics, Streptococcus group D, Streptococcus group G 719.
antibiotics, *Susicrofa semen* bacteria 715.
antifouling substances, fouling organisms, antibacterial activity, sea water 151.
azlocillin, mezlocillin, *Bacteroides* 748.
azlocillin, mezlocillin, *Pseudomonas aeruginosa* 6142.
azlocillin + sisomicin, in vitro, models 747.
aztreonam 777.
bactenoxins, Clostridium perfringens, L form 759.
bekanamycin, respiratory tract infection treatment, man 6186.
bile acids, synergism, benzylpenicillin, furagin, *Staphylococcus* 1618.
bis-(3-hydroxy-2-oxocyclo-heptatrien-(3,5,7)-yl)-sulfide, isolation, *Pseudomonas cepacia* 768.
1,4-bis-(3-(n-haxylcarbamylguanidine)propyl)piperazine dimethanesulfonate, gingivitis, man 813.
carbapenem, derivatives, in vitro, *Proteus vulgaris*, *Citrobacter freundii* 1650.
cefalor, Haemophilus influenzae type b, association, inoculum size 732.
cefoperazone = mezlocillin, gram-negative bacilli, *Staphylococcus aureus* 6146.
cefotaxime, bacteria infection treatment, man 6124.
cefotiam, bacteria infection treatment, animal models 6129.
cefusulodin = cefotaxim, anaerobic bacteria 6127.
cefazidime, *Pseudomonas* 6122.
cefazidime, *Pseudomonas*, Enterobacteriaceae 6121.
cefuroxim 1612.
cefuroxime, *Escherichia coli*, *Klebsiella* 6130.
cephalosporins, chemical modification 2540.
cephalosporins, gram-negative bacteria 1606.
cephalosporins, penicillins, agar diffusion test, *Pseudomonas aeruginosa* 728.
cephalosporins, reviews 674.
cephamycin, *Mycobacterium fortuitum* 1615.
chloramphenicol, thiampenicol 756.
citrautomycin A, citratomycin B 765.
cloxacillin + ampicillin, cloxacillin + cephalosporins, gram-negative bacteria, β -lactamase 1610.
cotrimoxazole, conferences 6367.
cotrimoxazole, folic acid pathway 6033.
cotrimoxazole, reviews, bacteria 6032.
cotrimoxazole, Shigella, clinical isolates 714.
dental cement + chlorhexidine gluconate 677.
derivatives, carminomycin, rubromycin, *Bacteroides mycoides* 2592.
dibekacin, urinary tract infection treatment, man 6187.
dioxidine, mechanisms, association, DNA biosynthesis 1557.
emulsifiers, anaerobic bacteria, use preservatives, canned food 255.
enoxin, Streptococcus group A 1677.
Enterobacteriaceae, amikacin, \pm cephalosporins, \pm moxalactam 1614.
enterochelin, scandium, indium, complex, *Escherichia coli* 1554.
erythromycin relationship binding serum, man 2562.
Escherichia coli, colicins, production, *Shigella sonnei* 669.
ethionium + antibiotics, *Pseudomonas aeruginosa*, clinical isolates 2523.
extracts, *Magnolia obovata*, *Magnolia officinalis*, *Streptococcus* mutants 1559.
N-formimidoyl thienamycin + amikacin, gram-negative bacilli, *Staphylococcus aureus* 1660.
N-formimidoyl thienamycin, \pm gentamicin, \pm tobramycin, antibiotic synergism, *Streptococcus faecalis*, *Streptococcus faecium* 1623.
N-formimidoyl thienamycin, *Neisseria meningitidis*, *Neisseria gonorrhoeae* 776.
N-formimidoyl thienamycin, stability, β -lactamase, comparison, cephalosporins, β -lactam bacteria 729.
N-formimidoyl thienamycin, *Staphylococcus aureus* 773.
furazolidone, *Vibrio cholerae*, *Vibrio parahaemolyticus*, enhancement, caffeine 1560.
gentamicin, *Pseudomonas aeruginosa* 1624.
Gossypium hirsutum phytoalexins, *Xanthomonas campestris* 460.
6- α -hydroxyethyl-2-acetoxyethyl-2-penten-3-carboxylate, *Staphylococcus* 1611.
in vitro, cephradine, antibiotic bacteria infection treatment 676.
in vitro, trimethoprim, rifampicin, synergism, bacteria drug resistance 6163.
in vitro, trimethoprim, sulfamethoxazole, cotrimoxazole, *Mycobacterium* trimethoprim 6034.
 α -interferon, *Staphylococcus* 686.
kirothrin, Clostridium pasteurianum 1665.
 β -lactam antibiotics, aminoglycoside antibiotics, synergism, therapeutic

Antibacterial activity, (continued)

- applications, reviews 6091
 β -lactam antibiotics, dose-response effects 743.
 β -lactam antibiotics, *Escherichia coli*, *Streptococcus faecalis* 739
 β -lactam antibiotics, *Haemophilus influenzae*, *Neisseria meningitidis*, *Streptococcus pneumoniae* 717.
 β -lactam antibiotics, penicillin-binding protein, relationship, autolysins activity 6088.
 β -lactam antibiotics, *Pseudomonas aeruginosa*, antibiotic resistance, gentamicin, carbenicillin 740.
 lysozymes, iodides, eggs 1552.
 mecillinam + nocardicin A, inhibition protein biosynthesis, cytolysis, *Escherichia coli* 2555.
 mezlocillin 6149.
 mezlocillin, amoxicillin + clavulanic acid, Enterobacteriaceae 745.
 mezlocillin, azlocillin, + cephalosporins 6148.
 mezlocillin, comparison, penicillins, gram-negative bacteria, gram-positive bacteria 6141.
 mezlocillin, conferences 6365.
 mezlocillin, gram-positive bacteria, *Haemophilus influenzae* 6143.
 nafcillin, + polymyxin B, + carbenicillin, + dibekacin, + fosfomicin, antibiotic synergism, *Pseudomonas aeruginosa* 1669.
 moxalactam, cefoperazone, *Streptococcus pneumoniae* 727.
 nanoamycin, *Vibrio alginolyticus* 1674.
 nitrification inhibitors 2405.
 norfloxacin 2453.
 penicillin, effects on *Neisseria meningitidis* morphology 738.
 penicillins, aminoglycoside antibiotics, *Pseudomonas aeruginosa* 741.
 phytoalexins, *Xanthomonas campestris* pv. phaseoli, defense mechanisms, Phaseolus vulgaris 1383.
 piromidic acid, *Staphylococcus aureus*, Enterobacteriaceae 1556.
 plants extracts, Iran 2458.
 potassium sorbate, butylhydroxyanisole, *Salmonella typhimurium*, preservatives, poultry 2035.
 prothracarin 1668.
Pseudomonas aeruginosa, aminoglycoside antibiotics + carbenicillin 1619.
Pseudomonas, azlocillin, ticarcillin, carbenicillin 744.
Pseudomonas cepacia pigments 1645.
Pseudomonas, *Escherichia coli*, aminoglycoside antibiotics + cephalosporins, antibiotic synergism 736.
Pseudomonas, penicillins, disc-diffusion test, interpretation 6145.
 quaternary ammonium compounds, teat dips, disease control, mastitis, cattle 1728.
 quinones derivatives, *Eschiariopsis* cell culture 673.
 ticarcillin, *Rickettsia* 1640.
 robrumycin, carmimycin, N-monoethyl derivatives, *Mycoplasma mycoides* 781.
 semisynthetic penicillins, gram-negative bacteria, Enterobacteriaceae 746.
Staphylococcus aureus, nafcillin + rifampin, oxacillin + rifampin, antibiotic antagonism 750.
Streptococcus bovis, carbohydrates effects on fungi patulin 273.
 surfactants, use media (isolation), *Salmonella*, meat 233.
 temocillin 6155.
 temocillin, *Escherichia coli* 2553.
 tetracycline, *Rickettsia* 1640.
 tetracarin, gram-positive bacteria 1671.
 thiacycline, comparison, tetracycline, doxycycline, minocycline 1637.
 ticarcillin + tobramycin, calcium, magnesium, zinc, effects on, *Pseudomonas aeruginosa* 754.
 trimethoprim analogs 6035.
 L-usnic acid, biosynthesis, lichens 6.
 vancomycin + gentamicin, vancomycin + tobramycin, antibiotic synergism, *Staphylococcus aureus* 771.
 vancomycin + rifampin, Enterobacteriaceae 772.
 vinoremycin components 779.

Antibacterial agents,

- activity, in vitro, conferences, books 6364.
Brachionus plicatilis, food sources, treatment infection, *Scophthalmus maximus* larvae, aquaculture 7609.
 \pm dimethyl sulfoxide, antibacterial activity 7919.
 evaluation, sulfate-reducing bacteria, radiospirrometry methodology 6320.
 feeds additives, residues analysis, livestock 252.
 iredmycin 3438.
Mycobacterium lepraemurium drug sensitivity testing 2466.
 naldixic acid analogs, antibacterial activity 5187.
 phenylacetic acid, 2-naphthylacetic acid, diphenylacetyl glycine, antibacterial activity 9660.
 production, tryptone heat treatments 8777.
 pyridonecarboxylic acid derivatives, antibacterial activity 5190.
 quinoxalones 5186.
Stochoespermum marginatum diterpenoids, antibacterial activity, *Staphylococcus aureus* 3315.
 structure-activity relationships 6044.
 treatment, infection, bacteria, association, drug resistance induction, cattle 3284.

Antibiotic A-19009,

- Streptomyces collinus*, structure, antiprotozoal activity, *Trichomonas vaginalis* 8616.

Antibiotic AL-87,

- effects on bacteria fatty acid composition 8895.

Antibiotic AM-2604 A,

- biosynthesis, *Streptomyces*, antiviral activity 3354.

Antibiotic antagonism,

- acyclorodopencillin + cephalosporins, antibacterial activity, in vitro 6144.
 cefotaxime, 3-desacetylcefotaxime 6118.
 ceftriaxone, + aminoglycoside antibiotics, *Pseudomonas aeruginosa* 7986.
 nafcillin + rifampin, oxacillin + rifampin, antibacterial activity, *Staphylococcus aureus* 750.
 penicillins, cefotaxime, cefoxitin 2533.
 penicillin, chloramphenicol, rifampin, *Listeria monocytogenes* 5247.
 piperacillin + cefoperazone, gram-negative bacteria, *Staphylococcus*, Enterobacteriaceae 3387.

Antibiotic AT-265,

- structure, antibacterial activity 1672.

Antibiotic A35512B,

- glycoproteins, structure, N.M.R., *Streptomyces candidus* 8027.

Antibiotic Bu-2470,

- Bacillus circulans* biosynthesis, physicochemical properties, antibacterial

Antibiotic Bu-2470, (continued)

- activity, *Pseudomonas* 8888.
Bacillus circulans, structure 8889.
 Antibiotic C-19393 E₅,
 structure, biological properties 1667.
 Antibiotic CC-1014,
Paeclomyces abruptus, characterization 2566.
 Antibiotic CC-1014B,
Paeclomyces abruptus, characterization 2566.
 Antibiotic CC-1065,
 biosynthesis, *Streptomyces zeilensis* 5541.
 comparison, *Actinomyces carulus* antibiotics biosynthesis, characterization 780.
Streptomyces carulus, biosynthesis 1656.
 Antibiotic DC-52,
Streptomyces melanovineus, biosynthesis, antibacterial activity, antitumor activity 8344.
Streptomyces melanovineus, structure 8345.
 Antibiotic E-0702,
 antibacterial activity, β -lactamase stability 8833.
 Antibiotic F 16-2,
 antifungal activity, *Aspergillus oryzae*, *Saccharomyces sake* 8031.
 antimicrobial activity, lactic acid bacteria, *Saccharomyces sake*, association sake 8024.
 resistant mutant screening, *Lactobacillus sake*, *Saccharomyces sake* 7896.
 Antibiotic FK-156,
 biosynthesis, *Streptomyces olivaceogriseus* sp. nov., *Streptomyces violaceus* 2582.
 Antibiotic GR-20263,
 antibacterial activity, *Pseudomonas*, Enterobacteriaceae 6121.
 Antibiotic J120-B,
 biosynthesis, *streptomyces flavovirens* 1670.
 Antibiotic K-582,
 amino acid sequence, *Metarhizium anisopliae* 7169.
 Antibiotic KA-5685,
Saccharopolyspora hirsuta, biosynthesis, isolation, characterization 8891.
 Antibiotic L-640.876,
 antibacterial activity 4426.
 antibacterial activity, mechanisms membrane permeability 4409.
 Antibiotic LL-BM123,
 N.M.R. 4400.
 N.M.R. 5265.
 Antibiotic LL-BM782,
 N.M.R. 4400.
 N.M.R. 5265.
 Antibiotic M-92,
 antibacterial activity, gram-positive bacteria, *Neisseria*, *Staphylococcus aureus*, *Mycoplasma*, antitumor activity 3428.
 isolation, *Micromonospora verruculosa*, antibacterial activity, *Staphylococcus aureus* 6194.
Micromonospora verruculosa sp. nov., biosynthesis 3426.
 physicochemical properties, *Micromonospora verruculosa* sp. nov. 3427.
 Antibiotic MF722-02,
 antibacterial activity, gram-positive bacteria, inhibition adenosinetriphosphatase 3422.
 Antibiotic OA-7653,
Streptomyces hygroscopicus subsp. *hiwaensis*, purification, characterization, antibacterial activity, *Mycobacterium*, gram-positive bacteria 7179.
 Antibiotic OM-704,
Streptomyces biosynthesis, characterization, antibacterial activity, gram-positive bacteria 3432.
 Antibiotic PR-1350,
 Oidiodendron truncatum, biosynthesis, characterization, antibacterial activity 7773.
 Antibiotic resistance,
 amikacin, gram-negative bacteria clinical isolates 4281.
 aminoglycoside antibiotics, enzymes, *Streptococcus faecalis* 3291.
 aminoglycoside antibiotics, *Staphylococcus*, plasmids transfer 7046.
 aminoglycoside antibiotics, *Streptomyces tenebrarius* 1539.
 amoxicillin, *Streptococcus sanguis* oral cavity isolates, relationship dental caries prophylaxis 8734.
 ampicillin, chloramphenicol, *Haemophilus influenzae*, *Streptococcus pneumoniae* 7985.
 ampicillin, *Haemophilus influenzae*, relationship, biotyping 7048.
 ampicillin, R factors, *Salmonella typhimurium* 646.
 ampicillin, role β -lactamase, *Haemophilus influenzae* 2400.
 antibiotic sensitivity testing, *Pseudomonas aeruginosa* 7023.
 antibiotic sensitivity testing, *Salmonella*, *Escherichia coli*, *Pasteurella haemolytica*, *Pasteurella multocida*, animal isolates, surveys 634.
 antibacterial agents, clinical isolates, *Mycobacterium*, tuberculosis 8747.
 association, antibiotics prophylaxis infection association surgery, man, reviews 9634.
 association, cadmium sensitivity, *Escherichia coli* plasmids 1536.
 association colonial characteristics, *Serratia marcescens* 4283.
 asn, modification enzymatic, aminoglycoside antibiotics, *Pseudomonas aeruginosa*, Enterobacteriaceae 640.
 association, *Proteus* clinical isolates, *Proteococcus* sensitivity typing 3264.
Bacillus sphaericus, *Bacillus licheniformis* 9642.
Bacillus thuringiensis 661.
 bacteria 9640.
 bacteria 9641.
 bacteria, aminoglycoside antibiotics, clinical aspects, dosage frequency effects on 6002.
 bacteria, aminoglycoside antibiotics, clinical aspects, conferences 6366.
 bacteria, aminoglycoside antibiotics, epidemiology, plasmids association, France 6006.
 bacteria, aminoglycoside antibiotics, incidence, Switzerland, clinical surveys 6003.
 bacteria, aminoglycoside antibiotics, role enzymes inactivation mechanisms 6005.
 bacteria, animal isolates, surveys 3287.
 bacteria, association, 7-hydroxytropoline inhibition aminoglycoside-2'-O-adenyltransferase 652.
 bacteria, clinical isolates 7024.
 bacteria, epidemiology 9647.
 bacteria isolates, hospitals 8732.
 bacteria, pathogenicity 2415.
 bacteria, relationship antibiotics treatment, prophylaxis 7881.
 bacteria, role, plasmids 6017.

Antibiotic resistance, (continued)

Bacteria, septicemia, man 645.
 Bacteria, urinary tract isolates, antibiotic sensitivity testing 4287.
 Bacteroides fragilis, clindamycin, in vitro 685.
 Bacteroides, role, β -lactamase, purification, characterization 4594.
 Candida albicans, amphotericin B + ketconazole 3307.
 Candida, amphotericin B 3308.
 cefotaxime, β -lactam antibiotics, reviews 5997.
 cefuroxime, Escherichia coli isolates 7893.
 cephalosporins, association, β -lactamase, uptake, Escherichia coli 9644.
 cephalosporins, Klebsiella oxytoca, clinical isolates 8731.
 cephalosporins, Neisseria gonorrhoeae 9637.
 cephalosporins, selection, Enterobacter cloacae 5157.
 cephalosporins, Staphylococcus aureus 5160.
 cephalosporins, Staphylococcus aureus 7035.
 Chlamydia psittaci, isolation, Anatidae 8741.
 chloramphenicol, analogs, R factor R26, R factor R55-1, Escherichia coli 654.
 chloramphenicol, oxytetracycline, R factors, Staphylococcus aureus 2403.
 clindamycin, Bacteroides fragilis, antibiotic sensitivity testing 9735.
 clindamycin, Bacteroides fragilis, detection 9655.
 clindamycin, Bacteroides fragilis, disc-diffusion test 7031.
 clindamycin, erythromycin, tetracycline, transfer, Clostridium difficile 6011.
 clindamycin, plasmid pBF4 transfer, Bacteroides fragilis 5149.
 clinical isolates, Campylobacter fetus subsp. jejuni enteritis, incidence, man 8733.
 Clostridium perfringens, meat isolates 5235.
 coliforms, detection, sea water 7902.
 coliforms, isolates, poultry 7030.
 coliforms, sewage treatment, urbanization, effects on 7879.
 coliforms, Streptococcus, salmonellae feeding, chickens effects on 3289.
 development, bacteria 6020.
 enhancement mechanisms, genetic analysis, Escherichia coli 7894.
 Enterobacter cloacae, cephalosporins, role, β -lactamase activity 7036.
 Enterobacteriaceae 9636.
 Enterobacteriaceae, clinical isolates 6021.
 Enterobacteriaceae, fresh water, harbors sediments isolates 9645.
 Enterobacteriaceae, infection, juveniles, cattle 643.
 Enterobacteriaceae, isolates, pneumonia, bronchitis, man 1537.
 Enterobacteriaceae plasmids, distribution, trimethoprim, gentamicin 3302.
 Enterobacteriaceae, Pseudomonas 2393.
 Enterobacteriaceae, transfer, R factors, wastewater treatment 1548.
 Enterobacteriaceae, transfer, role, R factors 1543.
 erythromycin, Streptococcus erythraeus, association adenine dimethylation 638.
 Escherichia coli, ampicillin, cephalothin, relationship β -lactamase activity 7028.
 Escherichia coli, animal isolates 665.
 Escherichia coli, cerebrospinal fluid clinical isolates 7904.
 Escherichia coli, clinical isolates 5153.
 Escherichia coli, diarrhea isolates, cattle, juveniles 1534.
 Escherichia coli, gene transfer, enterotoxins plasmids 3299.
 Escherichia coli, identification, contamination 8728.
 Escherichia coli, Klebsiella, clinical isolates 1524.
 Escherichia coli, milk isolates 4779.
 Escherichia coli, plasmid pKH80 relationship 631.
 Escherichia coli, poultry animal isolates 1535.
 Escherichia coli, Pseudomonas, drinking water isolates 3480.
 Escherichia coli, sideromycin, association ton A gene proteins 641.
 Escherichia coli, tetracyclines 1545.
 Escherichia coli, urinary tract clinical isolates 7034.
 Escherichia coli water isolates, R factors incidence 7204.
 R factors, Escherichia coli, animal isolates, chickens 7043.
 R factors, Pseudomonas aeruginosa 6031.
 R factors, Shigella 7044.
 fungi, contamination, vaccines, characterization 2396.
 fusidic acid, Escherichia coli plasmids genetic control, role, chloramphenicol acetyltransferase 9649.
 genes, streptomycin, Escherichia coli, mutants, selection methodology 4481.
 gentamicin, carbencillin, Pseudomonas aeruginosa, β -lactam antibiotics antibacterial activity 740.
 gentamicin, kanamycin, chloramphenicol, Salmonella typhimurium clinical isolates 4282.
 gentamicin, methicillin, plasmids, Staphylococcus aureus 6019.
 gentamicin, methicillin, Staphylococcus aureus, Eire hospitals isolates, plasmids role 7032.
 gentamicin, Staphylococcus aureus, conjugate plasmids analysis 8738.
 gentamicin, virulence, natural selection, Pseudomonas aeruginosa 6012.
 gram-positive bacteria, haematoxylin derivatives effects on 3289.
 Haemophilus influenzae, Haemophilus parainfluenzae, chloramphenicol, tetracycline 7873.
 Haemophilus influenzae, plasmids characterization, transfer, β -lactamase 644.
 kanamycin, characterization, plasmid R1-dr1 1520.
 kanamycin, tetracycline, R factors, Rhizobium japonicum 7875.
 β -lactam antibiotics, β -lactamase induction, Proteus vulgaris, Proteus rettgeri 3305.
 β -lactam antibiotics, β -lactamase, Pseudomonas aeruginosa 7878.
 β -lactam antibiotics, Clostridium perfringens, association, penicillin-binding protein 9651.
 β -lactam antibiotics, role membrane permeability, porins, Escherichia coli 1542.
 β -lactam antibiotics, Staphylococcus aureus, temperature effects on 3282.
 Lactobacillus, Bifidobacterium 8724.
 lincomycins, streptogramins, macrolide antibiotics, Enterobacteriaceae, animal isolates 660.
 macrolide antibiotics, lincomycin, clindamycin, Streptococcus, mastitis isolates 2399.
 mechanisms, Staphylococcus aureus, β -lactam antibiotics 3268.
 methicillin, fatty acid composition, Staphylococcus aureus, Staphylococcus epidermidis 8723.
 methicillin, phospholipid composition, Staphylococcus aureus 9648.
 methicillin, protein composition, Staphylococcus 555.
 methicillin, protein composition, Staphylococcus 2407.
 methicillin, Staphylococcus aureus 8740.
 methicillin, Staphylococcus aureus, nosocomial environments 3301.
 methicillin, Staphylococcus aureus, septa, peptidoglycans, biosynthesis, role 5148.
 moxalactam, cefoperazone, cefotaxime, antibiotic sensitivity testing,

Antibiotic resistance, (continued)

Enterobacteriaceae 5271.
 mutants, Azotobacter vinelandii, nitrogen fixation 9618.
 Mycobacterium intracellulare, association, membrane permeability 7047.
 Neisseria gonorrhoeae, β -lactamase, clinical isolates 3295.
 norfloxacin, Pseudomonas aeruginosa, Escherichia coli, media (selective) 2404.
 nystatin, Candida albicans, clinical isolates, oral cavity candidiasis 8748.
 nystatin, sterol composition, plasma membranes, Candida albicans 3277.
 oxytetracycline, minocycline, Staphylococcus aureus clinical isolates 3288.
 Pasteurella, animal isolates, cattle, respiratory tract diseases 7884.
 Pasteurella haemolytica, isolation, cattle 8722.
 penicillin, mechanisms, Francisella tularensis 8745.
 penicillin, Neisseria gonorrhoeae, plasmids 3270.
 penicillins, Streptomyces cacaoi mutants, role, penicillin-binding protein 3297.
 plasmids, β -lactam antibiotics, aminoglycoside antibiotics, Shigella sonnei 4278.
 plasmids, genetic control, Escherichia coli 2394.
 plasmids, structure, incidence, Enterobacteriaceae 6025.
 plasmids, trimethoprim, gram-negative bacteria, isolation, characterization 7872.
 polymyxin, membrane proteins, envelopes, Pseudomonas aeruginosa 2414.
 polymyxin, plasma membranes fatty acid composition, Pseudomonas aeruginosa 7040.
 polymyxin, Pseudomonas aeruginosa, association, outer membranes membrane permeability 632.
 population studies, Escherichia coli, Enterobacter cloacae 629.
 Propionibacterium, clinical isolates, acne 8736.
 Pseudomonas aeruginosa, plasmids, genes 1544.
 relationship, cations effects on protein H1 biosynthesis, Pseudomonas aeruginosa 5158.
 Rhizobium 2410.
 Rhizobium japonicum isolates, Glycine max nodules 651.
 rifampicin, Vibrio cholerae, β -D-galactosidase, catalase, alkaline phosphatase activity 6018.
 rifamycin, Bacillus subtilis, mutants, sporulation 7901.
 role, Staphylococcus aureus plasmids, clinical isolates, Australia 7029.
 rosaramicin, Ureaplasma urealyticum 2397.
 Salmonella, incidence, sewage 6016.
 Salmonella isolates, Netherlands, incidence 5161.
 Salmonella, screening 635.
 Salmonella typhi, R factors 7876.
 Salmonella typhimurium, isolation, USSR epidemics 5166.
 Salmonella typhimurium, R factors 5159.
 sewage effluents, coliforms, isolates, transfer, Escherichia coli 636.
 Shigella flexneri, clinical isolates, plasmids 4280.
 spectinomycin, Francisella tularensis 8874.
 Staphylococcus, aminoglycoside antibiotics, plasmids transfer 7042.
 Staphylococcus aureus, clinical isolates 3296.
 Staphylococcus aureus, isolation, operating theaters, nasopharynx, medical personnel 8980.
 Staphylococcus aureus, macrolide antibiotics 9646.
 Staphylococcus aureus, methicillin 3267.
 Staphylococcus aureus, methicillin 3403.
 Staphylococcus aureus, penicillins, erythromycin 3290.
 Staphylococcus aureus, plasmids transfer, relationship phase typing 8721.
 Staphylococcus aureus, propolis-antibiotics antibacterial activity 6058.
 Staphylococcus aureus, Staphylococcus intermedius, animal isolates 3279.
 Staphylococcus epidermidis 3292.
 Staphylococcus, isolation, goats 8744.
 Staphylococcus, N-formimidoyl thienamycin 7041.
 Streptococcus group B 7966.
 Streptococcus group D, β -lactam antibiotics, role, penicillin-binding protein 4273.
 Streptococcus group D, aminoglycoside antibiotics 6024.
 Streptococcus pneumoniae, British Isles 648.
 Streptococcus pneumoniae clinical isolates 3300.
 Streptococcus pneumoniae, clinical isolates, association, R factors detection 5163.
 Streptomyces azureus, Streptomyces erythraeus, Streptomyces vinaceus, Streptomyces fradiae, genes, cloning, characterization 1521.
 Streptomyces coelicolor + Streptomyces olivaceus, interspecific hybridization 9716.
 Streptomyces cremus, mutants, auxotrophs, nebramycin biosynthesis 8020.
 Streptomyces glaucosens, streptomycins 4382.
 Streptomyces vinaceus, Streptomyces coelicolor, genes, cloning 1523.
 streptomycin, aerobic bacteria, drinking water isolates 1533.
 streptomycin, N-methyl-N'-nitro-N-nitrosoguanidine induction mutation Streptomyces bikreniensis effects on 5256.
 streptomycin, Streptomyces griseus, factors affecting, inactivation, enzymes 1547.
 streptomycin, sulfamethoxazole, Yersinia enterocolitica 2524.
 streptomycin, Escherichia coli 3285.
 transfer, Shigella, Italy 8829.
 urinary tract infection clinical isolates 2418.
 viomycin, biosynthesis, Streptomyces puniceus 7161.
Antibiotic R 22-5417,
 biosynthesis, structure, Streptomyces clavuligerus 6197.
 stereochemistry, Streptomyces clavuligerus 6193.
 Streptomyces clavuligerus biosynthesis, antibacterial activity, Bacillus 6201.
Antibiotic RU28965,
 antibacterial activity 8041.
Antibiotic RU29065,
 antibacterial activity 8041.
Antibiotic RU29702,
 antibacterial activity 8041.
Antibiotic Sch 29,482,
 antibacterial activity, Neisseria gonorrhoeae 3444.
Antibiotic SC4-X,
 antibacterial activity, antifungal activity, purification, characterization, 7164.
Antibiotic sensitivity testing,
 Acinetobacter calcoaceticus, burn infection isolates 1597.
 Actinomadura 6109.
 Actinomycetes, isolation, Alnus nodules, rhizosphere 664.
 agar diffusion test, ceftazidime, Escherichia coli, Staphylococcus aureus, Pseudomonas aeruginosa 4371.
 agar diffusion test, Mycobacterium 9657.
 aminoglycoside antibiotics, β -lactam antibiotics, Yersinia enterocolitica, Bacteroides corrodens, Streptococcus pneumoniae 6089.

Antibiotic sensitivity testing, (continued)

- aminoglycoside antibiotics, Enterobacteriaceae, *Pseudomonas aeruginosa*, *Serratia* 4351.
 aminoglycoside antibiotics, *Staphylococcus aureus* 3378.
 anaerobic bacteria 9727.
 anaerobic bacteria, cephalosporins 7136.
 anaerobic bacteria, clinical microbiology 4328.
 anaerobic bacteria, methodology 1602.
 anaerobic bacteria, reviews 2519.
 anaerobic bacteria, reviews 6113.
 anaerobic microorganisms, methodology 1593.
 animal isolates, methodology 2504.
 antibiotic resistance, *Salmonella*, *Escherichia coli*, *Pasteurella haemolytica*, *Pasteurella multocida*, animal isolates, surveys 634.
 Autobac test, *Aeromonas hydrophila* 9731.
 automated methods, micro methods, bacteria 9729.
Bacillus stearothermophilus var. *calidolactis* 5180.
 bacteria 6111.
 bacteria 7964.
 bacteria, antibacterial activity quantitation methodology association 5239.
 bacteria, antimicrobial agents 5233.
 bacteria, British Isles 2463.
 bacteria, clinical isolates 2522.
 bacteria, clinical isolates 7131.
 bacteria, computer applications 9739.
 bacteria urinary tract isolates, antibiotic resistance 4287.
 bacteria, use, immunofluorescence, methodology 1605.
 bacteria, use, lasers nephelometry automated methods 9737.
 bacteriocins, relationship, taxonomy, *Lactobacillus* 1659.
 Bacteroides, cefotetan 4346.
 Bacteroides corrodens, carbon dioxide levels effects on 2507.
 Bacteroides fragilis 7130.
 Bacteroides fragilis 8811.
Campylobacter fetus subsp. *jejuni*, clinical isolates, kanamycin, gentamicin, chloramphenicol, nalidixic acid, clindamycin 6099.
 cefoperazone, *Clostridium perfringens*, *Bacteroides fragilis*, *Bacteroides fragilis* subsp. *thetaiotaomicron* 9743.
 cefotaxime, agar diffusion test 6120.
 cefotetan, bacteria 4352.
 cefotetan, clinical isolates, bacteria 737.
 cephalosporins 9746.
 cephalosporins, *Klebsiella pneumoniae* serotypes 4369.
 clindamycin, β -lactam antibiotics, *Bacteroides fragilis* 5262.
 clindamycin antibiotic resistance *Bacteroides fragilis* 9735.
 clinical isolates, clinical microbiology 712.
 clinical isolates, *Neisseria gonorrhoeae* 8807.
 clinical microbiology, surveys 4326.
Clostridium perfringens 4336.
Clostridium perfringens, meat isolates 5235.
 coagulase negative *Staphylococcus* 7122.
 comparison, *Mycoplasma pneumoniae*, rosamycin, erythromycin, tetracycline, spectinomycin 6092.
 diffusion tests, dilution tests, factors affecting 9722.
 diptheroids 7977.
 disc-diffusion test, cefoperazone, statistical analysis 9744.
 disc-diffusion test, temperature effects on 7976.
 Enterobacteriaceae 6096.
 Enterobacteriaceae 9636.
 Enterobacteriaceae, clinical isolates 726.
 Enterobacteriaceae, isolates, cattle 6085.
 Enterobacteriaceae, media (isolation) 9711.
 Enterobacteriaceae, *Pseudomonas* 2393.
 Enterobacteriaceae, relationship treatment, experimental infection, mice 9715.
Escherichia coli, animal isolates, chickens 4333.
Escherichia coli, isolation, diarrheas, neonates, cattle 3283.
Escherichia coli, isolation, juveniles cattle, feeding, milk substitutes 8742.
Escherichia coli, *Klebsiella*, *Alcaligenes*, *Pseudomonas aeruginosa*, nosocomial infection, man 6098.
Fusobacterium, *Bacteroides* 725.
Fusobacterium necrophorum isolates, cattle liver abscesses 7121.
 gastroenteritis bacteria isolates 2521.
 gram-negative bacilli, cephalosporins 2449.
 gram-negative bacilli, gentamicin resistance, β -lactam antibiotics 4342.
 gram-negative bacteria 9726.
 gram-positive bacteria, tetracycline, vancomycin 6202.
Haemophilus ducreyi chancroid clinical isolates, association, treatment, man 5191.
Haemophilus influenzae, *Haemophilus parainfluenzae*, chloramphenicol, tetracycline 7873.
Haemophilus influenzae, *Streptococcus pneumoniae*, clinical isolates 7985.
Haemophilus parahaemolyticus animal isolates 5189.
 inoculum standardization equipment 9730.
 β -lactam antibiotics, *Streptococcus* group B 723.
Lactobacillus, *Bifidobacterium* 8724.
Legionella pneumophila 9738.
 meclizolam, *Salmonella*, *Shigella*, *Vibrio cholerae* 3407.
 methanogenic bacteria, ribosomes protein biosynthesis 2423.
 methodology comparison, gram-negative bacilli 6090.
 methodology, factor affecting 6305.
 methodology, gram-negative bacteria 9039.
 methodology, *Staphylococcus aureus* 4381.
 microflora, otitis media, exudates, man, antimicrobial agents treatment 1586.
 moxalactam, cefoperazone, cefotaxime, Enterobacteriaceae 5271.
 moxalactam, disc-diffusion test, quality control 9745.
Mycobacterium, cephalosporins 7996.
Mycobacterium fortuitum, cephalothin= clavulanic acid, amoxicillin= clavulanic acid 7141.
Mycoplasma 2518.
Mycoplasma 7973.
Neisseria gonorrhoeae 3382.
Neisseria gonorrhoeae 3391.
Neisseria gonorrhoeae 4334.
Neisseria gonorrhoeae 9637.
Neisseria gonorrhoeae clinical isolates 2513.
Neisseria gonorrhoeae, clinical isolates, cephalosporins 5242.
Neisseria gonorrhoeae, penicillin G, tetracycline, spectinomycin, cefotaxime,

Antibiotic sensitivity testing, (continued)

- cefuroxime 5240.
Neisseria gonorrhoeae, Thailand 7078.
 neomycin, ampicillin, urease positive bacteria 751.
Nocardia, aminoglycoside antibiotics, β -lactam antibiotics 2517.
Nocardia asteroides, β -lactam antibiotics 3384.
 norfloxacin, quality control 9672.
 novobiocin, *Staphylococcus saprophyticus* 8879.
 penicillin G, *Streptococcus* group C, clinical isolates 7147.
 penicillins, clinical isolates 742.
 penicillins, gram-negative bacilli 8001.
 periodontal diseases isolates, bacteria 3376.
 polyene antibiotics, bacteria, growth zones relationship time 2520.
 polymyxin, *Yersinia pestis*, mutants 6174.
Propionibacterium acnes, clinical isolates 3381.
Pseudomonas aeruginosa 3386.
Pseudomonas aeruginosa 7023.
Pseudomonas aeruginosa 7068.
Pseudomonas aeruginosa, clinical isolates 1600.
Pseudomonas aeruginosa, methodology comparison 9761.
 quality control, agar diffusion test 713.
 quality control, disc-diffusion test 2514.
 relationship pharmacokinetics, clinical microbiology 4329.
Rickettsia rickettsii, doxycycline 1638.
Salmonella 5232.
Salmonella clinical isolates 6112.
Salmonella, meat isolates 9720.
Shigella, antibiotic resistance transfer, Italy 8829.
Shigella, clinical isolates 714.
Shigella, incidence, Ethiopia 2525.
Staphylococcus aureus 7072.
Staphylococcus aureus, β -lactam antibiotics 7978.
Staphylococcus aureus, addicts isolate, methicillin resistance, susceptibility, strains 3393.
Staphylococcus aureus, clinical isolates 3389.
Staphylococcus aureus, isolation, operating theaters, hospitals, nasopharynx, medical personnel 8860.
Staphylococcus, clinical isolates 6105.
Staphylococcus, clinical isolates 8804.
Staphylococcus clinical isolates 9734.
Streptococcus 1598.
Streptococcus, clinical isolates 724.
Streptococcus group B 7966.
Streptococcus group D, cephalosporins 9748.
Streptococcus pneumoniae, relationship meningitis treatment, man 8817.
Streptococcus pneumoniae, serotypes 5230.
Streptococcus, use, tetrazolium reduction, methodology 9975.
Vibrio cholerae, water isolates, reservoirs 7968.
Vibrio, dilution tests, agar diffusion test 3388.
 yeasts 2502.
Yersinia 2524.
Yersinia pestis 6110.
Antibiotic SM-1652,
 antibacterial activity 734.
 antibacterial activity 3398.
Antibiotic SQ 26,917,
 β -lactamase stability, antibacterial activity, gram-positive bacteria, anaerobic bacteria 8039.
Antibiotic synergism,
 amikacin, gentamicin, \pm carbenicillin, \pm piperacillin, antibacterial activity, *Pseudomonas aeruginosa* 755.
 aminoglycoside antibiotics=cephalosporins, antibacterial activity, *Pseudomonas*, *Escherichia coli* 736.
 amoxicillin=clavulanic acid, antibacterial activity, *Mycobacterium tuberculosis* 8845.
 antibacterial activity, daunomycin transformation, *Streptomyces erythromygenus* nov. 675.
 antibacterial activity, *Mycobacterium intracellulare* 3309.
 azlocillin, aminoglycoside antibiotics, *Pseudomonas aeruginosa* 8849.
 cefotaxime, 3-desacetylcefotaxime 6118.
 cefotaxime, 3-desacetylcefotaxime, *Proteus morganii*, *Pseudomonas acidovorans*, *Pseudomonas cepacia* 6117.
 ceftizoxime, aminoglycoside antibiotics, cephalosporins, antibacterial activity, gram-negative bacilli, *Staphylococcus* 2531.
 ceftizoxime, gentamicin, antibacterial activity, gram-negative bacteria isolates 2539.
 ceftizoxime, tobramycin, antibacterial activity, *Pseudomonas aeruginosa* 2534.
 ceftriaxone, \pm aminoglycoside antibiotics, *Pseudomonas aeruginosa* 7986.
 cephalixin, alafosfalin, index, fractional inhibitory concentration 7989.
 cephalexin, gentamicin, antibacterial activity analysis, methodology, *Klebsiella pneumoniae* 6123.
 5,6-cis-carbapenem+ β -lactam antibiotics, inhibition, β -lactamase, bacteria 1683.
 clavulanic acid, ticarcillin, antibacterial activity 6147.
 N-formimidoyl thienamycin, \pm gentamicin, \pm tobramycin, antibacterial activity, *Streptococcus faecalis*, *Streptococcus faecium* 1623.
 N-formimidoyl thienamycin= gentamicin+amikacin, antibacterial activity, *Streptococcus faecalis* 3417.
 gentamicin+carbenicillin, antiviral activity, *Pseudomonas aeruginosa* 7128.
 meclizolam+ampicillin, antibacterial activity, gram-negative bacteria 9758.
 miconazole+imidazole derivatives, antibacterial activity, *Staphylococcus*, *Mycobacterium*, \pm piperacillin, \pm carbenicillin, \pm dibekacin, \pm fosfomicin, antibacterial activity, *Pseudomonas aeruginosa* 1669.
 moxalactam+gentamicin, *Pseudomonas aeruginosa* 2530.
 sagamicin, fosfomicin, antibacterial activity 8023.
 semisynthetic penicillins, aminoglycoside antibiotics, antibacterial activity, *Enterobacteriaceae* 7125.
 tetracycline, penicillin, rifampicin, *Rickettsia prowazekii*, *Rickettsia sibirica*, chick embryos 7969.
 tobramycin, gentamicin, antibacterial activity, *Proteus*, *Pseudomonas aeruginosa* 7967.
 vancomycin+gentamicin, vancomycin+tobramycin, antibacterial activity, *Staphylococcus aureus* 771.
Antibiotic T-1982,
 antibacterial activity 735.

Antibiotic tolerance,

β -lactam antibiotics, β -lactamase, screening 637.
methicillin, cloxacillin, Staphylococcus aureus 5250.
oxacillin, Staphylococcus aureus, pH effects on 3408.
penicillin, Streptococcus mitior 1620.

Antibiotic U-0142,

physicochemical properties, Streptovorticillum, taxonomic significance 7163.

Antibiotic U-56,407,

isolation, characterization 9764.

Antibiotic U-63196E,

antibacterial activity, β -lactamase stability, new records 8832.

Antibiotic VA-2,

antibacterial activity, effects on Staphylococcus aureus 6213.

Antibiotic WF-3161,

Petrela guttula, biosynthesis, isolation, characterization, antifungal activity, Trichophyton asteroides, antitumor activity 7451.

Antibiotic X-1486E,

biosynthesis, Nocardia 6208.

Antibiotic Y-T0679H,

Chromobacterium violaceum, biosynthesis, antibacterial activity 9768.

Antibiotic Z928,

antitumor antibiotics, Actinomyces, biosynthesis, structure 5543.

Antibiotic Z15,

Gluconobacter biosynthesis, antibacterial activity, structure activity 2570.

Antibiotic Z590,

antitumor antibiotics, Actinomyces, biosynthesis, structure 5543.

Antibiotic 6643-X,

streptomycetes, fermentation, isolation, characterization 1666.

Antibiotics,

acid-base status, aqueous ethanol.

Actinomadura, actinomycin gram-positive bacteria 1487.

Actinomyces canaliculus, biosynthesis, characterization, comparison, antibiotic CC-1065 780.

activity, bioassays, media (culture) 7970.

activity concentrations, anaerobic bacteria oral microflora, clinical isolates 8814.

administration, in vitro, treatment, diseases, historical account 9701.

administration, long-term effects, association, sanitation, food contamination 7586.

animal wastes fermentation, microorganisms, effects on methane gas production 1039.

antibacterial activity, aerobic bacteria, temperature effects on 1603.

antibacterial activity, bioassays, media (culture) 7972.

antibacterial activity, body fluids, man 4377.

antibacterial activity, dose-response effects 2510.

antibacterial activity, gram-negative bacilli bacteriuria isolates, man 7073.

antibacterial activity, measurements 722.

antibacterial activity, Staphylococcus aureus 8819.

antibacterial activity, Streptococcus group D, Streptococcus group G 719.

antifungal activity, Susscrofa semen bacteria 715.

antifungal activity, detection methodology, Neurospora crassa protoplasts 5440.

antimicrobial activity, mechanisms 9725.

antimicrobial activity, treatment, infectious diseases, books 1817.

assays, body fluids 9724.

Azotobacter, antifungal activity, fungi 5933.

Bacteria, antifungal activity, Phytophthora cactorum 8633.

Basidiomycetes, antimicrobial activity, bacteria, fungi 2496.

biosynthesis, characterization, N.M.R., methodology, reviews 7988.

biosynthesis, actinomycetes, role nuclease, proteinase, α -amylase 7123.

biosynthesis, Actinomycetes, soil microorganisms, screening, micromethods, radioactive labeling traces 9882.

biosynthesis, microorganisms batch culture 716.

biosynthesis, microorganisms, genetic engineering 7974.

biosynthesis, microorganisms, screening, books 2727.

biosynthesis, Rhizobium trifolii, antimicrobial activity 3379.

biosynthesis stability, SCP2 plasmid mediated, Streptomyces coelicolor 1621.

biosynthesis, Streptomyces, gene distribution 1594.

biosynthesis, use media (culture), microorganisms contamination 8803.

cardinal, antibacterial activity 9723.

disease control, Xanthomonas phaseoli, leafspot, Vigna radiata 509.

DNA complex, C.D. 7971.

\pm EDTA + Tris, antibacterial activity, pathogens, bacteria 7080.

effects on, Bacteroides, growth 6100.

effects on, Bordetella pertussis, colonial characteristics, morphology, biochemical characteristics 1596.

effects on, growth, Rhizoctonia solani 3335.

effects on Macrophomina phaseolina spore germination 7760.

effects on Pseudomonas aeruginosa morphology 9752.

effects on Staphylococcus aureus cell walls phospholipids content 3380.

effects on Staphylococcus ultrastructure 678.

enzymes, biosynthesis improvements, microorganisms strains combination cultivation, reviews 6548.

+ethonium, antibacterial activity, bacteria 1558.

+ethonium, antibacterial activity, Pseudomonas aeruginosa, clinical isolates 2523.

excretion, sheep, milk, effects on yogurt production 4871.

fermentation, Penicillium, Streptomyces, detection, bacteria contamination, Bacter test 8824.

inhibition zones, bacteria, measuring techniques 9719.

Lactobacillus acidophilus, purification, characterization 9776.

levels, milk, inhibition starter cultures, cheese 8482.

organic matter decomposition, soil microorganisms, effects on 5922.

phenazine, biosynthesis, Streptomyces cinnamonensis 8034.

pretreatment, Escherichia coli ampicillin susceptibility 7061.

production, bacteria, role, genetic engineering 1601.

production, fermentation, regulation, reviews 4675.

production, fermentation technology 5237.

production, fungi, chirality 7127.

production, Melanconis flavovires, inoculum levels, liquid culture 8022.

production, soil, Streptomyces, reviews 4403.

production, Streptomyces, reviews 4532.

production, use, fungi, reviews 5238.

-propolis, antibacterial activity, Staphylococcus aureus 6058.

proteins, purification, characterization, Lactobacillus acidophilus 6207.

Pseudomonas aeruginosa, purification, physicochemical properties 7175.

residues, identification methodology, milk 8474.

Antibiotics, (continued)

resistance, aerobic bacteria, sepsis isolates 8729.

resistant mutant, Vibrio, effects on α radiation damage 6026.

resistant mutant, Vibrio, effects on α radiation damage 6026.

secondary metabolism, microorganisms, books 3636.

sensitivity, actinomycetes storage, morphology 7070.

sensitivity, bacteria, urinary tract isolates 8613.

sensitivity, Micrococcaceae clinical isolates, biochemical characteristics 8827.

sensitivity, Staphylococcus aureus, association bile acids resistance 2406.

sensitivity, Staphylococcus epidermidis 8828.

sensitization, Escherichia coli, Salmonella typhimurium, role polymyxin B 7158.

standardization, reviews 2501.

Streptomyces, isolation, soil 3390.

Streptomyces tendae, biosynthesis, antibacterial activity, gram-positive bacteria 8878.

structure, mass spectroscopy, reviews 8825.

structure, mechanisms, books 7277.

susceptibility, anaerobic bacteria, animal isolates, cattle, pneumonia 7987.

susceptibility, clinical isolates, association, Streptococcus group D infectious diseases, man 8826.

susceptibility, Haemophilus ducreyi 6103.

susceptibility, Haemophilus influenzae clinical isolates 9721.

treatment, Mycoplasma plant diseases, technology 5839.

treatment, mycoplasma-like organisms infection, trees 5859.

treatment, prophylaxis, relationship antibiotic resistance, bacteria 7881.

triosins, antibacterial activity 3424.

use, bacteriology, immunoassays reviews 1604.

use, decontamination, gastrointestinal tract anaerobic bacteria, man, in vitro 8812.

use, environmental hygiene, bacteria nosocomial infection, man 8981.

use, media (isolation), Shigella 6338.

use, Mycobacteriales, pure culture 7257.

use, Rhizobium strains identification 887.

use, Rhizobium strains identification 890.

use, selection microorganisms 8805.

Xenorhabdus, activity, Nematoda bacteria fungi 3372.

Antibodies,

anti teichoic acid, Staphylococcus aureus, counter immunoelectrophoresis, immunodiffusion, infection 9927.

antigen Vi, Salmonella typhi, detection, enzyme-linked immunosorbent assay 9920.

Aspergillus fumigatus, enzyme-linked immunosorbent assay detection, aspergillosis, man 9990.

Aspergillus fumigatus, man, enzyme-linked immunosorbent assay methodology 3624.

Bordetella bronchiae, detection, enzyme-linked immunosorbent assay, methodology 3611.

Bordetella pertussis hemagglutinins, enzyme-linked immunosorbent assay 889.

Bordetella pertussis, radioimmunoassay detection, cattle 1789.

bovine leukemia virus, detection, enzyme-linked immunosorbent assay, use, monoclonal antibodies 4474.

Brucella abortus lipopolysaccharides, purification 9914.

Brucella, agglutination 4484.

Chlamydia trachomatis, detection, enzyme-linked immunosorbent assay 3605.

coatings sheep red blood cells, agglutination, detection rotavirus (human) 9856.

coronavirus, detection, enzyme-linked immunosorbent assay 9849.

equine infectious anemia virus, indirect fluorescent antibody test detection, methodology 6200.

hepatitis A virus detection methodology 3521.

hepatitis A virus, detection methodology 3533.

hepatitis B surface antigen, detection, use, immunoassays, solid phase methods 4470.

hepatitis B virus, antigens, cross-reactivity use, woodchuck hepatitis virus detection, radioimmunoassay 9861.

influenza virus, characterization, complement fixation, methodology 9863.

ionizing, X radiation probes, diagnosis methodology, salmonellosis 1769.

Legionella pneumophila, detection, enzyme-linked immunosorbent assay 9902.

Leptospira interrogans ser.hardjo, Leptospira interrogans ser.pomona, enzyme-linked immunosorbent assay, cattle 8118.

measles virus, detection, comparison, enzyme-linked immunosorbent assay, immune adherence hemagglutination, hemagglutination inhibition, hemolysis 8053.

mouse hepatitis virus, detection, radioimmunoassay 7232.

Mycoplasma pneumoniae, detection, solid phase methods radioimmunoassay 9870.

Neisseria meningitidis, detection, immunoassays, E.S.R., methodology 9966.

poliovirus, detection, radioimmunity immunoassays 1758.

pseudorabies virus, pigs serum, detection, immunodiffusion 5374.

rabbits, binding glyceraldehyde-phosphate dehydrogenase, substrate structure, Saccharomyces cerevisiae 7332.

respiratory syncytial virus, detection, hemadsorption 1742.

rotavirus, detection, use, immunofluorescence, μ microplates 4471.

rubella virus, detection, agglutination methodology 9836.

rubella virus, serum, immune status, comparison, enzyme-linked immunosorbent assay, indirect hemagglutination, hemagglutination inhibition 9837.

Shigella dysenteriae, assays, passive hemagglutination 882.

Staphylococcus aureus teichoic acid, detection, enzyme-linked immunosorbent assay 9939.

Streptococcus group A antigen M, detection, passive hemagglutination 6325.

streptolysin O, detection, clinical microbiology 4507.

venous toxins, blood donors, screening, latex agglutination 3621.

togavirus, detection, enzyme-linked immunosorbent assay, methodology 1746.

Ureaplasma urealyticum, detection, enzyme-linked immunosorbent assay 9871.

vsna virus, maei virus, detection, enzyme-linked immunosorbent assay, sheep, goats 2651.

Antibody response,

neutralization detection, avian infectious bronchitis virus, chickens 9014.

Newcastle disease vaccines, aerosols, chickens 7188.

Anticoagulants,

afatoxins analogs, synthesis 8507.

Antifoam agents,

Saccharomyces cerevisiae, biomass production 3834.

Antifouling substances,

antibacterial activity, fouling organisms, metals, sea water 151.

Antifungal activity,

ammonia, Phymatotrichum omnivorum, mycelia, sclerotia 696.

amphotericin B, \pm polyene antibiotics, \pm ketoconazole, \pm miconazole, Candida albicans 1633.

amphotericin B, Sporothrix schenckii, temperature effects on 1569.

antifungal agents interaction 1567.

Subject Index

Antifungal activity, (continued)

benomyl, inhibition cutinase, *Fusarium solani* f.sp.pisi 1414.
benomyl, *Verticillium dahliae* f.412.
benzimidazole, *Ceratomyces fibrillata* f.sp.platani 694.
brefeldin A, lipid metabolism, *Candida albicans* 1564.
comparison, thiabendazole, sodium orthophenylphenate, CGA-64251, oranges green mold 1319.
demon, effects on membrane structure, mitochondria 1416.
extracts, *Rhizoctonia solani*, *Sclerotinia sclerotiorum*, *Sclerotium roisii* 1570.
falsidomine, biosynthesis, Scheffersia digitata, dermatophyte fungi 687.
fungicides, foliar applications, Begonia, powdery mildew 1393.
hydrogen peroxide, *Candida*, preservatives, contact lenses 709.
Hyphs suaveolens leaves oil, Helminthosporium oryzae 494.
ketconazole, derivatives, Plasmodium falciparum, *Candida*, clinical isolates 1566.
leaves extracts, Lycopodium esculentum 695.
metalaxyl, Pythium, Phytophthora 481.
monolaurin 689.
peracetic acid, foot rot, pathogens, Gramineae 1394.
polydial, biosynthesis, Pseudowinteria colorata 688.
preservatives, wheat post-harvest decay 441.
proamocarb, Pythium, Phytophthora 502.
propionic acid, feeds preservation, fungi, growth, monitoring 1086.
Pseudomonas capacia pigments 1645.
sakuranetin, Botrytis cinerea, defense secretions, Ribes nigrum 1379.
sakuranetin, Ribes nigrum leaves, Botrytis cinerea infection 1332.
surfactants, pears post-harvest decay 1323.
thiophanate, *Ceratomyces fibrillata* f.sp.platani 694.
tradenol diastereoisomers 693.
tradenol, pyrazophos, ditailinfos, iprodione, tolerance, Ampelomyces quisqualis 1401.

Antifungal agents,

activity, in vitro, treatment, diseases, historical account 9701.
antifungal activity, dermatophyte fungi 9682.
5-aryl-2-amino-1,3,4-oxa(triaz)diol 2474.
blast, *Oryza sativa*, effects on *Pyricularia oryzae* pathogenesis 5827.
2,7-diamidino-9H-fluorene-9-one, antifungal activity, *Candida albicans* 2472.
disease control, Erysiphe polygoni, powdery mildew, Pium sativum 8637.
disease control, *Rubus idaeus* 487.
disease control, *Sclerotium roisii* infection, Agrostis palustris 1397.
effects on Nicotiana tabacum microflora 496.
fumigants, disease control, post-harvest decay, Pseudotsuga menziesii wood 1468.
hair roots, efficacy, tests, methodology, guinea-pigs 8164.
imidazoles, antifungal activity sterols dermatophytes, *Candida* 7936.
interaction, antifungal activity 1567.
orthophosphorus, association, Pium sativum protection, cutinase inhibition, *Fusarium solani* 500.
piperazinomycin, structure 1661.
prevention, fungi, spoilage, hay 247.
quantification, high-performance liquid chromatography, serum, man 5438.
resistance, fungi, New Zealand 7880.
resistance, Mycogone perniciosa, Verticillium fungicola, Basidiomycetes pathogens 5826.
Saccharomyces cerevisiae, effects on sterols biosynthesis 5203.
1,3,4-thiadiazolo [3,2-a]-s-triazine-5(6H, 7H)-thiones, synthesis, antifungal activity 4307.
thiisemcarbazonones, synthesis 7114.
treatment timing, Rhynchosporium secalis leaf blotch, Hordeum, disease control 488.
USA, soil-borne diseases control, *Rhizoctonia solani*, association, manure applications 323.

Antigen (enterobacterial common),

Shigella sonnei, trisaccharides components structure 9196.

Antigen K12,

Escherichia coli, structure 5534.

Antigen M,

Streptococcus group A, antibodies detection, passive hemagglutination 6325.

Antigen O,

antigenic determinants, trisaccharides synthesis, Salmonella, Escherichia coli 2821.

Antigen S,

Klebsiella, polysaccharides structure 8329.

polysaccharides, biosynthesis, Salmonella anatum UDPgalactose 4-epimerase deficient mutant, synthetic galactosyl fucaprenyl diphosphate intermediates 7440.

Antigen O9,

biosynthesis, Escherichia coli membranes 110.

Antigen S,

Clostridium botulinum, purification, characterization 2742.

Antigen VI,

Salmonella typhi, enzyme-linked immunosorbent assay, detection, antibodies 9920.

Antigen-antibody complexes,

hepatitis B surface antigen, detection polyethylene glycol turbidity 826.

hepatitis B surface antigen, enzyme-linked immunosorbent assay, use seroepidemiology, man 822.

Antigenic characteristics,

bean yellow mosaic virus infection, Vicia faba 1128.

parvovirus (canine) vaccines 2598.

viruses, preservation, phosphorous tungstic acid+ammonium molybdate, storage 7226.

Antigenic determinants,

antigen O, trisaccharides synthesis, Salmonella, Escherichia coli 2821.

cell surface antigens, physicochemical properties, Saccharomyces cerevisiae 6385.

enterotoxins, Vibrio cholerae, Escherichia coli 6714.

lipopolysaccharides, Salmonella, binding, serum, bactericidal activity, mice 2452.

proteinase, purification, immunochemistry, Pseudomonas fluorescens 8291.

Rauscher leukemia virus, glycoproteins, molecular weight, monoclonal antibodies, precipitation, methodology 1748.

Antigenic variants,

plants viruses, detection, enzyme-linked immunosorbent assay 1757.

Antigenicity,

herpesvirus (equine) 1 vaccines, production, chickens 8053.

Antigens,

adenovirus, detection, immune adherence hemagglutination 9846.

attachment, methodology, enzyme-linked immunosorbent assay, detection, rubella virus immunoglobulin G 9851.

bacteria, expression, immunoassays detection 9874.

Antigens, (continued)

canine distemper virus, immunoglobulin G, detection, enzyme-linked immunosorbent assay, methodology 5369.
carbohydrates, Legionella, enzyme-linked immunosorbent assay 6307.
cell surface, antigenic determinants, physicochemical properties, Saccharomyces cerevisiae 6385.
Clostridium difficile, counter immunoelectrophoresis 4477.
concentration standardization association Leptospira agglutination micromethods 7260.
coxsaekievirus B4, coxsackievirus B5, cross-reactivity, radioimmunoassay 8099.
Cryptococcus, latex agglutination, proteinase effects on interference factors 9992.
detection, hemolysis erythrocytes, man 824.
detection, Salmonella typhi, feces isolates association typhoid fever, use, agglutination 841.
Escherichia coli plii, agglutination assays 5383.
hepatitis B virus, antibodies, cross-reactivity use, woodchuck hepatitis virus detection, radioimmunoassay 9861.
hepatitis B virus, use purification, coagulation factor VIII, column chromatography 3542.
herpes simplex virus 2, immunoglobulin G, detection, enzyme-linked immunosorbent assay 7227.
influenza A virus, detection, enzyme immunoassay 9840.
Leptospira biflexa, agglutination, immunodiagnosis, Leptospirosis, man 5380.
localization, methodology comparison, Pasteurella haemolytica, cryopreservation 849.
microorganisms, detection, enzyme-linked immunosorbent assay methodology 7216.
microorganisms, enzyme-linked immunosorbent assay+electrophoresis 6285.
Neisseria gonorrhoeae, enzyme-linked immunosorbent assay 3565.
Neisseria meningitidis, detection, enzyme-linked immunosorbent assay 5396.
Neisseria meningitidis, Haemophilus influenzae, detection, latex agglutination 2663.
purification, bluetongue virus 5478.
relationship, bone resorption factors, Actinomyces viscosus, characterization 3711.
rinderpest virus, detection, fluorescent antibody test, methodology, diagnosis, cattle 830.
rinderpest virus, detection, immunoprecipitation 2658.
Streptococcus group B, detection, latex agglutination, amniotic fluid, monkeys 9938.
use, agglutination, methodology, Streptococcus groups 3563.
use, classification, Enterobacteriaceae, Vibrionaceae 2666.
vesicular stomatitis virus, biosynthesis, relationship α -interferon antiviral activity, enzyme immunoassay 1762.
viruses, localization, protein A+gold, eating 1750.
yellow, mycoplasma-like organisms, detection, enzyme-linked immunosorbent assay, immunoelectron microscopy, Callistephus chinensis 8597.

Antigliobulin hemagglutination test,
immunodiagnosis, blastomycosis, histoplasmosis 5434.

Antileukemia agents,
Lactobacillus bulgaricus production 5544.

Antimicrobial activity,
biquaternary ammonium compounds 703.
3,6-dinitro-1,8-naphthalylamino acids, 3,6-diamino-1,8-naphthalylamino acids, synthesis 702.
preservatives, acetic acid, sodium chloride, essential oils 706.

Antimicrobial agents,
activity, bacteria, urinary tract isolates 8767.
activity, in vitro, treatment, diseases, historical account 9701.
activity mechanisms 9725.
activity, organic matter effects on, reviews 6081.
adsorption, blood culture, bacteremia, diagnosis, man 836.
antibacterial activity comparison, cefotaxime, moxalactam 6126.
antibacterial activity, drug resistance, Pseudomonas paucimobilis 2512.
antibiotic sensitivity testing, bacteria 5233.
antimicrobial activity, comparison in vivo, in vitro 4327.
3-aryl-2-arylimino-4,5-disubstituted- Δ^4 -thiazolines, synthesis, antifungal activity, antibacterial activity 4318.
1-aryl-3-[3-(nitro-4-methoxyphenyl)-5-phenyl formazan,
3-aryl-5-[3-(nitro-4-methoxyphenyl)-2-phenyl tetrazolium bromide, antifungal activity, antiviral activity, antibacterial activity 6082.
bacteria, resistance, association, plasmids, reviews 8735.
combination, antibacterial activity, Escherichia coli, dose-response effects 7920.
drug sensitivity testing, Chlamydia psittaci 7087.
drug sensitivity testing, drug resistance, books 10001.
+EDTA-tromethamine, antibacterial activity, Pseudomonas aeruginosa 8750.
+EDTA-tromethamine, antibacterial activity, Escherichia coli 8765.
effects on, cell adhesion, Neisseria meningitidis 6106.
effects on Legionella pneumophila incidence, cooling water, British Isles 1706.
effects on Physarum polycephalum, chemotaxis 4306.
efficacy, drug sensitivity testing, use, fungi, bacteria 9702.
sensitivity, Staphylococcus aureus, nose clinical isolates 3313.
skin disinfection, man, books 6359.
+soaps, use, man, reviews 6277.
specificity, cell cycle, Schizosaccharomyces pombe 690.
Staphylococcus clinical isolates, susceptibility 3281.
susceptibility, Escherichia coli, statistical analysis methodology 1795.
synthesis, biological properties 8773.
topical application, disinfection, skin, man, reviews 6278.
topical application, reviews 6080.
treatment, otitis media, microflora, exudates, man, antibiotic sensitivity testing 1586.
urine, bioassays, Bacillus subtilis spores 9708.
use, drug sensitivity testing, antimicrobial agents efficacy 9702.
yeasts, food contamination, bakery products, water effects on 240.

Antimycobacterial agents,
= dimethyl sulfoxide, antimycobacterial activity, Mycobacterium urae-intracellulare 2401.

Antineoplastic drugs,
+ β -lactam antibiotics, synergism, antibacterial activity, gram-negative bacilli 3385.

Antioxiants,
antibacterial activity 7084.
antimicrobial activity, Escherichia coli, Staphylococcus aureus, *Candida albicans* 4319.

- nitrohinum**,
rust, disease resistance, plant breeding 3140.
- nitropeptic**,
hospitals, bacteria disinfection 5347.
hospitals, bacteria disinfection 5348.
mechanisms, bacteria resistance 2408
- nitrosera**,
comparison, indirect fluorescent antibody test, *Bacteroides fragilis* 1803.
disease control, viruses, ornamental plants 2270.
Glomus chlamydosporos, production 6965.
media (culture), *Ureaplasma urealyticum* killing 833.
production, foot-and-mouth disease virus, vaccines, guinea-pigs 5284.
production, rabbits, enzyme-linked immunosorbent assay, barley yellow dwarf virus, cowpea mosaic virus 6297.
Staphylococcus aureus serotyping, media (culture) effects on 881.
- nitrotoxins**,
fungi, screening, identification, characterization, methodology 898
- nitrovascular agents**,
+2-acetylpyridine, +2-acetylquinoline, antibacterial activity 3310.
antibiotic resistance, clinical isolates, *Mycobacterium tuberculosis* 8747.
drug sensitivity testing, *Mycobacterium tuberculosis* 2422.
minocycline, *Mycobacterium tuberculosis* 8898
- nitroform agents**,
antimicrobial activity, bacteria, clinical isolates, cancer patients 9675.
carbohydrate composition, *Leptinus edodes* 1963
Microellobosporia gneea, polysaccharides, carbohydrate composition 6587
- nitroform antibiotics**,
Actinomycetes, biosynthesis, structure 5543.
antibiotic CC-1065, biosynthesis, *Streptomyces zelensis* 5541.
mycoltenins, *Streptomyces nishriensis* biosynthesis, physicochemical properties 2827
mycoltenins, *Streptomyces nishriensis* biosynthesis, structure 2828
neocarzinostatin, *Streptomyces carnositatus*, radiomunoassay 9202.
Pseudomonas yoshimotoensis, bacitracin production, culture conditions 8347.
purification, characterization, antitumor activity, Actinomycetes, screening 2825
screening methodology, detection, Actinomycetes 2581.
Streptomyces coeruleus, isolation, structure 1647.
- nitroval activity**,
2-amino-5-(2-sulfamoylphenyl)-1,3,4-thiadiazole, structure-activity relationships 1573.
EDTA treatment, tobacco mosaic virus infection, *Nicotiana tabacum*, Phaseolus vulgaris 511.
herpes simplex virus 1, herpes simplex virus 2, antiviral agents synergism 1572.
interferon, inhibition, protein biosynthesis, vesicular stomatitis virus 1575.
interferon, Moloney leukemia virus, virions, infection, cells, biochemical analysis 698.
 β -interferon, synergism, antiviral agents, herpes simplex virus 1, Vero cells 697
monolaurin, \pm butyated hydroxyanisole, \pm sorbic acid, \pm methyl hydroxybenzoate 700.
Phytolacca americana proteins, chemical modification effects on 1576.
quaternary ammonium compounds 1571.
tromantidine, herpes simplex virus 1 replication 1574.
- nitroval agents**,
activity, *in vitro*, conferences, books 6364.
activity measurement, nucleic acids hybridization analysis, cytomegalovirus DNA biosynthesis 8798
antiviral activity, clinical aspects 3367.
antiviral activity, influenza virus, reviews 5215.
D-arabinofuranosyl derivatives 3342.
E-5-(2-bromovinyl)-2'-deoxyuridine, antiviral activity, herpesvirus 5218.
Escherichia coli var. *antiarcolus*, isolation, characterization, tobacco necrosis virus infection 8583.
Clivia miniata alkaloids, antiviral activity 6069.
Cuscuta reflexa extracts, antiviral activity 6072.
9-(1,3-dihydroxy-2-propoxymethyl)guanine, antiviral activity, herpes simplex virus 5217.
9-(3,4-dihydroxybutyl)guanine, antiviral activity, herpes simplex virus replication 5218
effects on rhadovirus replication 6068.
5-methyl-2'-deoxyuridine, drug sensitivity testing, herpes simplex virus 2 5219.
induction, tobacco mosaic virus infection, *Nicotiana glauca* 5818.
Kalanchoe sap 3344.
mechanisms activity, interaction viruses enzymes 9695.
mechanisms, treatment, viruses infection, man, reviews 3364.
Nicotiana glauca, *Nicotiana tabacum*, simulation nucleotides biosynthesis, antiviral activity, tobacco mosaic virus 7746.
nucleosides analogs, inhibition viruses replication 3352.
plants extracts, vaccinia virus 3343.
Podophyllum peltatum extracts, antiviral activity 6071.
poly(β -L- β -diaminopropionic acid), synthesis, antiviral activity, Newcastle disease virus 4315.
synergism, β -interferon, antiviral activity, herpes simplex virus 1, Vero cells 697.
synergism, antiviral activity, herpes simplex virus 1, herpes simplex virus 2 1572.
thiosemicarbazones, antiviral activity 7098.
thiosemicarbazones, synthesis 7114.
trifluorothymidine, cytomegalovirus (human) 3347.
- nitroval state**,
cells, interferon 3345
cells, interferon effects on 3350.
lysocleithin permeabilized mice 3173 cells, interferon induction 3370.
- nitrovalin**,
antibacterial activity 2556.
- nitrovalis melanocetus**,
+Bacillus thuringiensis, pathogens, biological control, Lymantria dispar 2832.
induction, *Lymantria dispar*, role, *Bacillus thuringiensis* aerial applications 3722.
- nitrovalis euteiches**,
root rot, interaction stem rot, *Rhizoctonia solani*, *Pisum sativum* 9328.
root rot, *Phaseolus vulgaris*, incidence, USA, Wisconsin, bioassays 3923.
- nitrovalis euteiches f.sp. phaseoli**,
virulence, *Phaseolus vulgaris*, comparison *Pythium ultimum* 347.
- Aphanomyces euteiches f.sp. pisi**,
root rot, pathogenesis, *Pisum sativum* 9319.
- Aphelandra squarrosa**,
leafspot, *Myrothecium roudum* 5747.
- Aphidicolin**,
antiviral activity, avian sarcoma virus replication 3341.
biodegradation, microorganisms 4752.
- Aphididae**,
barley yellow dwarf virus, infection, *Triticum aestivum*, identification, aerial photography 6762.
biological control, Entomophthorales, Gramineae 8360.
biological control, *Erynia neopaphidis* conidia 8361.
damage, crop fields, *Triticum* 3301
disease spread, viruses, *Solanum tuberosum* 2181.
disease transmission, barley yellow dwarf virus, *Triticum aestivum* 9340.
disease transmission, cucumber mosaic virus, *Phaseolus vulgaris* 7654.
disease transmission, potato virus S strains, isolation, North America, Chenopodium quinoa 6829.
disease transmission, *Solanum tuberosum*, potato virus Y, potato virus X, potato virus S, potato leaf roll virus, USA 6814.
disease transmission vectors, *Vigna unguiculata*, cowpea banding mosaic virus, cowpea necrosis virus, cowpea chlorotic spot virus 5673.
disease transmission, viruses, plant diseases 1122.
filters, prevention transmission, association, viruses infection pathology, *Triticum* 147.
vectors, alfalfa mosaic virus infection, Medicago sativa, epidemiology 5696.
vectors, disease transmission, barley yellow dwarf virus, Hordeum vulgare 9341.
vectors, watermelon mosaic virus, disease transmission 4966.
vectors, watermelon mosaic virus 2, Jordan 1247.
- Aphis craccivora**,
potato leaf roll virus, disease transmission, feeding behavior, permethrin, deltamethrin effects on 8526.
vectors, cowpea banding mosaic virus infection, *Vigna unguiculata*, insecticides, disease control 5808
vectors, pumpkin mosaic virus infection, Cucurbita maxima, transmission (horizontal) 1231.
- Aphis fabae**,
Entomophthoraceae infection, fungicides effects on 489.
vectors, disease transmission, potato virus Y, plant disease 9400.
- Aphis gossypii**,
disease transmission, banana mosaic virus, Musa sapientum 3069.
- API test**,
Enterobacteriaceae, identification 838.
Enterobacteriaceae, identification 859
Enterobacteriaceae, identification, clinical isolates 4492.
identification, *Basidiobolus*, *Conidiobolus*, enzymes 899.
identification, clinical isolates, non-fermentative gram-negative bacteria, oxidase-positive bacteria 9019.
identification, gram-negative bacteria, biochemical characteristics, blood culture 839.
identification methodology, non-fermentative gram-negative bacteria 9903.
Staphylococcus epidermidis, identification, biotyping 9910.
- Apiocarpin**,
response, *Apios tuberosa*, inoculation, fungi 3143.
- Apios tuberosa**,
inoculation, fungi, apiocarpin response 3143.
- D-Apiose reductase**,
purification, characterization, gram-negative cocci 4631.
- Apium**,
stunt, mycoplasma-like organisms, diagnosis, fluorescence 2166.
- Apium graveolens**,
leafspot, fungicides disease control 4098.
- Apium graveolens var. dulcis**,
Fusarium oxysporum f.sp. *apil* yellows, factors affecting 5748.
- Apothecia**,
development, *Sclerotinia trifoliorum*, infection, *Trifolium incarnatum* 2106.
- Appetite**,
animal models, man, relationship, mushrooms 3815.
- Apple chlorotic leafspot virus**,
infection, double-stranded RNA isolation, plants 2981.
- Apple mosaic virus**,
disease control, antiviral agents injection, Malus pumila 9500.
effects on carbohydrates levels, fruits, Malus pumila 8562.
- Applis**,
digestion (anaerobic), methanogenesis 4442.
fruit juices, yeasts microflora 9279.
Gladiolus rooseum, post-harvest decay, pathogenesis, amino acids, levels 1324.
post-harvest decay, *Penicillium expansum*, calcium chloride, disease control 5798.
scab, cold storage effects on pathogenesis 3105.
storage, post-harvest decay, *Trichoderma harzianum* 8602.
Venturia inaequalis infection, factors affecting 437.
- Appressoria**,
development, *Colletotrichum musae* infection, *Musa sapientum* 5733.
- Apyrase**,
levels, chlorotetracycline biosynthesis, *Streptomyces aureofaciens* 8004.
purification, activity, *Streptomyces aureofaciens* 7321.
- Aqueculture**,
Scophthalmus maximus larvae, infection treatment, antibacterial agents, *Brachionus plicatilis*, food sources 7609.
water pollution, phytoplankton, association, *Crassostrea gigas*, food contamination 2924.
- Aquatic bacteria**,
heat production, calorimetry methodology 8145.
isolation, alginate lyase biosynthesis 97.
phyto biodegradation 5595.
- Aquatic ecosystems**,
nitrogen cycle, factors affecting, conferences 908.
- Aquatic environment**,
Bacillus sphaericus, biological control, *Culicidae* 1024.
bacteria biodegradation, wood cell walls 8426.
bacteria, most probable number detection, use, calculator 8139.
Campylobacter fetus subsp. *jejuni*, enumeration methodology 2676.
Escherichia coli detection methodology 2667.
isolation, *Salmonella*, methodology 3558.
mercury, chemical separation 1516.
microenvironments, xenobiotics biodegradation, microorganisms 4762.

Aquatic environment, (continued)

- microorganisms, biodegradation, pollutants, seasonal variations, water salinity effects on 2876.
Pseudomonas fluorescens, *Pseudomonas aeruginosa*, cyanide biosynthesis, in vitro 6606.
Pseudomonas putida, phenols conversion, structure effects on 2882.
 sediments, oxalic acid, biodegradation, bacteria 7543.
 substrates uptake, association, microorganisms enumeration methodology 818.
- Aquatic microorganisms.**
 air-water interface, isolation, ponds, scanning electron microscopy, observation techniques 8088.
 extracellular polymers, role waste water treatment, cell aggregation 8059.
 fouling organisms, corrosion steel surfaces, sea water 1055.
 microscopy, observation methods 2647.
- Auifers,**
 contamination, bacteria, methanogenesis, phenol 4450.
 enterovirus, waste disposal sites, movement 5328.
- Ara-A,**
 antiviral activity, Epstein-Barr virus, lymphoblastoid cell lines 6067.
- Arabinitol,**
 detection, gas chromatography, diagnosis, candidiasis 9993.
- Arabinofuranosyl**
 derivatives, antiviral agents 3342.
- 9- β -D-Arabinofuranosyl adenine,**
 pathway, conversion, *Streptomyces saganensis*, herbicidin A production 4408.
- 9- β -D-Arabinofuranosyl-2-fluoroadenine,**
 inhibition replication, herpes simplex virus, HeLa cells 7104.
- Arabinomannan,**
Mycobacterium smegmatis, use, enzyme-linked immunosorbent assay, diagnosis, leprosy, man 6328.
- L-Arabinose dehydrogenase,**
Azospirillum brasilense, purification, characterization 5527.
- L-Arabinose-binding protein,**
 purification, characterization, periplasmic space, *Escherichia coli* 6374.
- Arabinosyladenine,**
 antiviral activity, susceptibility, herpes simplex virus 6078.
- Arabis mosaic virus,**
 disease transmission, *Xiphinema diversicaudatum*, disease control, fumigation, *Lilium* ligatum 6871.
 effects on, yield, *Rheum raphaniticum* 2198.
 host range, plants, New Zealand 6731.
- Arachidonic acid,**
 Phytophthora infestans, infection, induction phytoalexins, tubers, *Solanum tuberosum* 428.
- Arachis,**
 interspecific hybridization, plant breeding, *Cercospora arachidicola*, disease resistance 7727.
 rust, disease resistance 4082.
- Arachis chacoense,**
 peanut mottle virus isolation, pathogenicity, role, disease reservoirs 6743.
- Arachis hypogaea,**
 contamination, aflatoxins, factors affecting 2941.
- Arachis hypogaea,**
 association, *Rhizoctonia solani*, soil population levels, anastomosis, USA, Texas, USA, New Mexico 5094.
 black pod, *Thielaviopsis basicola*, disease resistance, plant breeding 9465.
 black rot, *Cylindrocylindrium crotalariae*, soil inoculum, epidemiology, spatial distribution 1123.
 blight, *Sclerotinia minor*, chlorothalinal disease control 3151.
 blight, *Sclerotinia minor*, fungicides disease control 4100.
 blight, *Sclerotinia minor* sclerotia quantitation 5680.
Cercospora leafspot, bavistin effects on 4119.
 chlorosis, induction, nodulation, *Rhizobium japonicum* 7828.
 cultivars screening, disease resistance, *Puccinia arachidis* rust, *Cercosporidium personatum* leafspot 9475.
Cylindrocylindrium crotalariae infection, germplasm disease resistance 474.
 disease resistance, *Puccinia arachidis*, rust 4083.
 fungicides seed treatments, association, disease control 2291.
 genetic analysis, disease resistance, leafspot, *Cercospora arachidicola* 452.
 germplasm, disease resistance, *Pythium myriophyllum* 9474.
 Glycine max, cowpea mottle virus transmission, *Bemisia tabaci* vectors 4946.
 herbicides, disease control, *Aspergillus niger* crown rot, *Aspergillus flavus* root rot 2277.
 leafspot, *Cercospora arachidicola*, *Cercosporidium personatum*, chlorothalinal, disease control 1409.
 leafspot, disease resistance, screening, *Cercospora arachidicola* sporulation 5047.
 leafspot, fungicides, disease control 9485.
 leaves volatiles, effects on *Sclerotinia minor* sclerotia germination, blight 4937.
 metham sodium disease control, *Pythium myriophyllum* pod rot, *Verticillium wilt* 1411.
 nitrogen fixation, yield, fertilizer applications effects on 6994.
 nodulation, genetic analysis, *Rhizobium* 7015.
 nodulation, nitrogen fixation, mixed culture, Gramineae 4250.
 pathology, rust, *Puccinia arachidis*, survival 5679.
 peanut clump virus, disease transmission 6735.
 peanut mild mottle virus infection, etiology, China, People's Rep. 9326.
 peanut mottle virus infection, *Rhizobium* effects on pathogenesis 5687.
 plant breeding, disease resistance, blight, *Sclerotinia minor* 1342.
 protein composition, nitrogen levels, *Glomus fasciculatus* effects on 6949.
Puccinia arachidis inoculation, host plants genotypes effects on urenidiospores 5693.
Rhizobium, identification, use, enzyme-linked immunosorbent assay 6306.
 roots, acid phosphatase, alkaline phosphatase, *Glomus fasciculatus* 6947.
 seedlings, growth, nodulation, *Cercospora arachidicola* leafspot effects on 341.
 seeds, *Aspergillus parasiticus*, *Aspergillus oryzae*, spoilage 3802.
 seeds inoculation, *Rhizobium*, nodulation, nitrogen fixation 9591.
 shreds, composts, effects on soil microorganisms, organic compounds, soils (sandy) 5133.
 water stress effects on *Aspergillus flavus* infection 5664.
 yield, *Cercospora arachidicola* leafspot, interspecific relationships, *Phoma arachidicola* blotch 2998.
- contamination, *Aspergillus flavus*, aflatoxins, factors affecting 2988.
- Arachnia,**
 periodontal diseases isolates, antibiotic sensitivity testing 3376.
- Arachnitis dankaniensis,**
 cellulose decomposition 2679.
- Arbutus menziesii,**
 mycorrhizas 6962.
 mycorrhizas symbiosis, USA, California 4196.
- Arceuthobium abietinum,**
 parasitism, branches, *Cytospora abietis* dieback, *Abies magnifica* 5863.
- Arceuthobium americanum,**
 rust, *Peridermium bethelii*, association, *Pinus contorta* 6932.
- Archebacteria,**
 methanogenesis 7017.
- Artichoke,**
 nuclear polyhedrosis virus 1044.
- Artium lappa,**
 host plants, tobacco ringspot virus 6823.
 stunt, RNA viroids, etiology 4021.
- Artium tomentosum,**
 stunt, RNA viroids, etiology 4021.
- Arctostaphylos manzanita,**
 mycorrhizas 6962.
 mycorrhizas symbiosis, USA, California 4196.
- Arctostaphylos uva-ursi,**
 mycorrhizas 6962.
- Arca,**
 orchards, rhizosphere, nitrogen-fixing bacteria, nitrogen fixation 9595.
- Arca catechu,**
 leaf stripe, epidemiology, *Xanthomonas campestris* pv. *arca* 8568.
- Arginine,**
 purification, characterization, *Bacillus anthracis* 6483.
- Arginine,**
 biodegradation, *Lactobacillus plantarum* 7549.
 electrodes, *Streptococcus lactis* use 879.
 fosfomycin derivatives, antibacterial activity 8890.
 mutants, *Acinetobacter calcoaceticus*, ornithine, production 6389.
 residues, glyceraldehyde-phosphate dehydrogenase, 2,3-butanedione chemical modification, effects on physicochemical properties, kinetics, *Saccharomyces cerevisiae* 7352.
 residues, transtetrolase active sites, 2,3-butanedione chemical modification, effects on kinetics, *Saccharomyces cerevisiae* 7355.
- Arginine decarboxylase,**
 stereochemistry, *Escherichia coli*, *Bacillus cadaveris* 6506.
- Arginyl-tRNA synthetase,**
 purification, physicochemical properties, mechanisms, *Saccharomyces carlsbergensis* 4600.
- Aristata comarographioides,**
 leafspot, Glycine max 2997.
- Armilaria bulbosa,**
 population dynamics, nutrient cycles, decomposition, roots, wood, *Quercus robur* 5861.
- Armilaria luteobubalina,**
 infection, Eucalyptus, etiology 8652.
- Armilaria mellea,**
 rhizomorphs formation, tannic acid stimulation, role pathogenicity, trees 1455.
 root rot, mortality, *Pinus*, *Pseudotsuga*, *Abies*, forests 5075.
- Armilla ostoyae,**
 population dynamics, nutrient cycles, decomposition, Basidiomycetes, wood, *Quercus robur* 5861.
- Armilaria velutina,**
 population dynamics, nutrient cycles, decomposition, Basidiomycetes, wood, *Quercus robur* 5861.
- Armilla mellea,**
 infection, *Abies balsamea*, plantations 7788.
- Armoracia lappathifolia,**
 peroxidase, use, enzyme-linked immunosorbent assay, hepatitis B surface antigen 825.
- Armoracia rusticana,**
 brittle root, *Spiroplasma citri*, epidemiology, geographical distribution 3059.
 pathology, *Spiroplasma citri* infection 9388.
 plant diseases, *Spiroplasma citri*, disease transmission, *Macrostes fascifrons* 6803.
- Aroma compounds,**
 Basidiomycetes, biosynthesis 3727.
 chemical composition, volatiles, *Agaricus bisporus* 4772.
- Aromatic compounds,**
 amino acids, *Streptomyces levons*, effects on levorin biosynthesis 1662.
 aroma compounds, lactic acid bacteria, milk 1068.
 association, alkylbenzene sulfonates biodegradation, microorganisms 1997.
 biodegradation, *Phanerochaete chrysosporium* 7544.
 biodegradation, *Rhizobium* 3784.
 biodegradation, yeasts, isolates, mangrove swamps sediments 9253.
 digestion (anaerobic), sediments 4760.
 halogenated, bacteria, dehalogenation, lakes, sediments 6648.
 hydrocarbons, biodegradation, Beijerinckia, plasmids association 5144.
 hydrocarbons, biodegradation, *Cunninghamella elegans*, bacteria 3263.
 hydrocarbons, metabolism, microorganisms, estuaries sediments 5145.
 mineralization, bacteria, lakes, sewage 2008.
 oxidation, *Cunninghamella elegans*, association, glucuronide, sulfate biosynthesis 2391.
 oxidation, fungi 4521.
 ozonation, effects on wastewater treatment, biodegradation 5294.
 production, fruits, *Vitis vinifera*, role grey mold, *Botrytis cinerea* 9402.
 + riboflavin, +magnesium chloride, media (culture), photoactivation, bactericidal activity, *Salmonella typhimurium* 8781.
 transformation, bacteria 2019.
 transformation, *Saccharomyces cerevisiae*, oxygenase, reviews 3667.
- Aromatic,**
 amines, biodegradation, aerobic conditions 8436.
- Arracacha virus B,**
 transmission (seed), *Solanum tuberosum*, symptoms 406.
- Arsenic,**
 Bacteroides susceptibility 681.
- Arsenic,**
 oxidation, mixed culture, *Pseudomonas putida*+*Alcaligenes eutrophus* 2383.

- Artemia salina**,
elongation factor 1 α -chain, amino acid sequence, comparison elongation factor Tu, *Escherichia coli* 4573.
- Arthronox lanicollis**,
Claviceps purpurea isolation, association, strains adaption 116.
- Arthrobacter**,
aliphatic nitrile hydratase, purification, characterization 1895.
amidase, purification, characterization 1896.
biodegradation, pentachlorophenol, soil 2891.
conversion, guaiacols, lignin 2889.
feeding patterns effects on glucose metabolism, relationship activated sludge 6247.
D-glucose isomerase, relationship, glucose, fructose, interaction, germanic acid 1936.
hydrolysis, malathion, enzymes, characterization 8416.
nitrification, acetylene effects on 594.
parathion hydrolysis, soil 160.
pathogenicity effects on, *Beta vulgaris* crop production 403.
pentachlorophenol biodegradation 5583.
polysaccharides sulfur, carbohydrate composition 2818.
xylose isomerase immobilized enzyme use, feeds syrups production, germanic acid effects on glucose fructose equilibrium 4864.
- Arthrobacter citreus**,
peat biodegradation 2877.
- Arthrobacter globiformis**,
enzymatic synthesis, FAD 9214.
glutamic acid production, nutrient requirements 4569.
immobilized cells, steroids transformation 4697.
immobilized cells, 3-ketosteroid- Δ^1 -dehydrogenase activity 3688.
- Arthrobacter urethralis**,
zymolase, purification 935.
- Arthrobacter oxidans**,
6-hydroxy-L-nicotine oxidase, 6-hydroxy-D-nicotine oxidase assays 6531.
- Arthrobacter siloliophilus**,
glucose uptake, cytochalasins effects on 1553.
- Arthrobacter simplex**,
hydrocortisone-17 α -acetate conversion prednisolone-17 α -acetate 5529.
single-cell protein, feeding trials, effects on hematology, organs histology, rats 8491.
single-cell protein, nutritive value, rats, hydrocarbons, carbon sources 7597.
- Arthropoda**,
biological control, granulosis virus, *Malus* 8355.
biological control, biological control, pathogens, foliar applications, methodology, crop fields 991.
pest control, biological control, viruses, dispersal 989.
- Artichoke latent virus**,
characterization, ultrastructure, geographical distribution, plant diseases 315.
- Articulospora infesta**,
biodegradation, *Populus tremuloides*, leaf litter 8045.
- Artocarpus heterophyllus**,
orchards, rhizosphere, nitrogen-fixing bacteria, nitrogen fixation 9595.
- Artocarpus lakoocha**,
fruits, spoilage, *Aspergillus niger*, *Drechslera rostrata* 2238.
- Aryl acylamidase**,
purification, characterization, *Pseudomonas fluorescens* 3736.
- 5-Aryl-2-amino-1,3,4-oxa-thiazolones**,
antifungal activity 2474.
- 3-Aryl-2-arylimino-4,5-disubstituted- Δ^1 -thiazolines**,
synthesis, antifungal activity, antibacterial activity 4318.
- 1-Aryl-3-(3-nitro-4-methoxyphenyl)-5-phenyl formazan**,
antimicrobial agents, antifungal activity, antiviral activity, antibacterial activity 862.
- 3-Aryl-5-(3-nitro-4-methoxyphenyl)-2-phenyl tetrazolium bromide**,
antimicrobial agents, antifungal activity, antiviral activity, antibacterial activity 6082.
- Arylglycerol- β -xyranolase**,
biodegradation mechanisms, lignin models, *Fusarium solani* 6651.
- Arylsulfatase**,
soil activity, human impact, motor vehicles, USA, Alaska 6951.
- Arylsulphohydrolase**,
sand, activity, correlation, vegetation, British Isles 6955.
- 2-(2-Arythioethyl)pyrrolidine**,
derivatives, antifungal activity 9680.
- Ascheronia aleoidea**,
toxins production, relationship culture 7627.
- Achrocyta avenae**,
leafspot, pathogenclimatic conditions, *Avena sativa*, *Triticum aestivum*, *Hordeum vulgare* 8549.
- Ascite tumor cells**,
encephalomyocarditis virus infected, N-phenyl-N'-3-hydroxyphenylthiourea effects on RNA biosynthesis 3683.
encephalomyocarditis virus infected, N-phenyl-N'-3-hydroxyphenylthiourea effects on protein biosynthesis 3684.
- Asciadiol**,
conversion, pautin, *Penicillium urticae* 6690.
- Ascochlorin**,
Ascochyta viciae, synthesis 7186.
- Ascochyta brachypodii**,
leafspot, *Andropogon gerardi*, *Andropogon scoparius*, *Sorghastrum nutans* 1174.
- Ascochyta fabae**,
infection, *Vicia faba*, disease control 1138.
Pisum sativum disease resistance, *Mycosphaerella pinodes* infection, effects on 460.
- Ascochyta pisi**,
infection, induction endopolygalacturonase inhibitor, defense mechanisms, *Pisum sativum* 1350.
toxins, role pathogenicity, necrosis, *Pisum sativum* 1140.
- Ascochyta pteridium**,
Pteridium aquilinum, leaves lesions, measuring techniques, computer applications, video image analysis 4924.
- Ascochyta rabiei**,
blight, *Cicer arietinum*, disease resistance, inheritance 8667.
blight, *Cicer arietinum*, reviews 1142.
- Ascochyta viciae**,
ascochlorin, synthesis 7186.
- Ascomycorine sarcoides**,
2,5-dihydroxy-3-(p-hydroxyphenyl)-6-phenyl-1,4-benzoquinone isolation, characterization 5556.
- Ascomycetes**,
fungal flora, seeds, *Compositae* 7726.
host range, substrate preferences, India 7645.
mutants, cellulose biodegradation 165.
plant diseases, ecological distribution, France 2207.
soil microorganisms, Spain, check lists 3202.
- Ascorbic acid**,
content, *Embilica officinalis*, fungi infection 3964.
effects on citric acid production, *Aspergillus niger* 5468.
effects on, daunomycin, adriamycin, antitumor activity, antimicrobial activity 8033.
inhibition, *Campylobacter fetus* subsp. jejuni, growth 3327.
- Ascosphaera apia**,
antifungal activity, disinfectants 4304.
- Ascospores**,
Glomerella cingulata, disease spread, epidemiology, *Malus domestica* 8570.
Saccharomyces cerevisiae, isolation 1810.
Saccharomyces, *Kluyveromyces*, heat resistance, erythromycin inhibition sporulation 1631.
Sclerotinia sclerotiorum, infection, symptoms, *Glycine max*, *Phaseolus vulgaris* 9334.
Venturia inaequalis, infection, *Malus*, pathogenesis 7683.
Venturia pinna, production, disease control, urea, fenarimol, baycor, scab, *Pyrus communis* 1395.
- Asexual reproduction**,
Aspergillus parvulus, relationship, aflatoxins production 3864.
Puccinia coronata, relationship pathogenicity, *Rhamnus cathartica* 9338.
- Ash**,
industrial wastes, aluminum extracton, citric acid, *Aspergillus niger* 5989.
volcanoes, USA, Washington, environmental impact, nitrogen cycle, lakes, bacteria 5122.
- Asia, Southeast**,
viruses infection, *Oryza sativa* 4955.
- Aspergines**,
Candida guilliermondii, stability, freezing, drying 7333.
inactivation, pH effects on, *Saccharomyces cerevisiae* 5519.
kinetics, substrate specificity, mechanisms, *Acinetobacter glutaminasificans* 6543.
Thermoactinomyces vulgaris, isolation, characterization 9181.
- Aspergillus**,
Streptomyces griseus, effects on streptomycin biosynthesis 7151.
- Asparagus**,
flowers, *Fusarium moniliforme* air spora contamination 9414.
- Asparagus officinalis**,
Agrobacterium tumefaciens attachment mechanisms, factors affecting 7687.
Phoma asparagi infection 7700.
Phytophthora rot 9383.
purple spot, *Stemphylium vesicarium*, pathology 1296.
storage, fungicides treatment 4121.
- Aspartate aminotransferase**,
activity, rhizosphere microorganisms, factors affecting 5911.
yeasts, affinity chromatography 1856.
- Aspartate ammonia-lyase**,
Escherichia coli, L-alanine production 927.
- Aspartate carbamoyltransferase**,
ATP, CTP interaction, *Escherichia coli* 1906.
catalytic subunits, amino acid sequence, *Escherichia coli* 6562.
Escherichia coli, ultrastructure, crystal structure 23.
- Aspartate kinase**,
potassium, ammonium, sodium, lithium activation, *Escherichia coli* 6536.
regulation, *Streptomyces clavuligerus* S-(2-aminoethyl)-L-cysteine resistant mutant 8809.
- L-Aspartate- β -decarboxylase**,
Pseudomonas dacunhae, L-alanine production 927.
- L-Aspartic acid**,
biosynthesis, *Escherichia coli*, immobilized cells 2745.
biosynthesis, *Escherichia coli* immobilized cells, enzyme activity 4579.
- Aspartic proteinase**,
Aspergillus, assays 8276.
Claviceps purpurea, purification, characterization 5496.
production, *Aspergillus*, surfactants effects on 7094.
purification, characterization, *Fusarium moniliforme* 7360.
- α -L-Aspartyl-L-phenylalanine methyl ester**,
sweeteners, organoleptic evaluation, spoilage, beverages 3803.
- Aspergilliosis**,
Aspergillus fumigatus, enzyme-linked immunosorbent assay detection antibodies, man 9990.
fluorescence diagnosis, tissues 4525.
- Aspergillus**,
acetanilid conversion 7561.
aflatoxins, animals, interaction, metals, dietary intake, reviews 4900.
aflatoxins, animals, interaction vitamins nutrition 4899.
aflatoxin B1 levels effects on chickens metabolism 3882.
aflatoxin M1 detection, high-performance liquid chromatography, dairy products 7614.
aflatoxins biosynthesis 4901.
aflatoxins, contamination, *Arachis hypogaea*, factors affecting 2941.
aflatoxins contamination, peanuts, quality control 2940.
aflatoxins, effects on deoxyribonuclease, *Mammalia* 7613.
aflatoxins production, growth, *Boletus edulis*, *Agaricus bisporus* 8501.
aluminum phosphate solubilization, acid production 5891.
aspartic proteinase, assays 8276.
aspergilliosis, fluorescence diagnosis, tissues 4525.
biodegradation, cellulose 5594.
biodegradation, phospholipids, triacylglycerols, cholesterol 2881.
biosynthesis, 3-methoxy-2,5-toluquinone, antibacterial activity 1643.
Cajanus cajan seed germination, effects on 7796.
cellulase, kinetics 4586.
chemicals, antifungal activity 3336.
citric acid production, reviews 5470.
Citrinin detection, chromatography, grain 7589.
colonization, straw, triticum, *Vicia faba*, composting 3781.
corn spoilage, storage 2069.

Aspergillus, (continued)

disease control, factors affecting, barley storage 7724.
drug sensitivity testing, aflatoxin A 4308.
food contamination, corn, wheat, storage 443.
food contamination, fruit juices, Venezuela 7574.
grains, nutritive value, chickens 3852.
growth, aflatoxins biosynthesis, butylated hydroxyanisole, butylated hydroxytoluene, tertiary butylhydroquinone, propyl gallate effects on 5646.
infection, *Vigna radiata* seeds, storage conditions effects on 2111.
pathogens, Pisces, isolation methodology 9078.
patulin, incidence. Beta vulgaris roots feeds 1089.
phosphate solubilization, organic acids, soil 3187.
plant diseases, phytooxins disease resistance, India, reviews 1369.
populations, South Africa Rep plans 4217.
post-harvest decay, corn, genetic analysis 9451.
pyridines coenzymes biosynthesis 3689.
 α -sarcosine, restriction, mitogillin, N-terminus amino acid sequence, homology 114.
self fluorescence, use, detection, tissues 8156.
soil, herbicides effects on 8707.
soil microorganisms, soil amendment, carbendazim, fluorometuron, curacron, effects on 2373.
spoilage, effects on fatty acids, peanuts 4053.
surfactants effects on aspartic proteinase production 7094.
susceptibility, lucknomycin antifungal activity 7182.
uranium mobilization, mycelia growth, rocks 7014.

Aspergillus aculeatus

cellulase, hydrolysis, cellulose 3699.
cellulolytic enzymes, production 7409.
production, cellulase, media (culture), growth conditions, effects on 3698.
soft rot, citrus sinensis, association pectinolytic enzymes 3965.

Aspergillus amstelodami

pathogenesis, *Brassica campestris*, fluorescence, microscopy 2188.

Aspergillus awamori

exo-1,4- α -D-glucosidase, active sites ionization 6459.
nicotinamidenucleotide amidase, purification, characterization 6457.
proteinase immobilization, role, silanes 1860.

Aspergillus awamori var. kawachi

cellulase immobilized enzymes, α -amylase, starch biodegradation activity 106.
exo-1,4- α -D-glucosidase, active sites ionization 3669.
immobilized enzymes, α -amylase, exo-1,4- α -D-glucosidase, glucose production 8305.

Aspergillus awamori

Azotobacter chroococcum, composts enrichment 7799.

Aspergillus candida

distribution, feeds, radiation disinfection 7605.
extracellular proteolytic enzymes, biosynthesis, association, deficiency, carbon, nitrogen, sulfur 1933.
infection, *Zea mays*, propionic acid effects on growth 6746.
post-harvest decay, sorghum, stored products, effects on, growth, *Insecta* 5799.
Aspergillus carneus, trifluorallin biodegradation 8446.

Aspergillus clavatus

cytochalasin E, cytochalasin K, isolation, characterization 6702.
nickel toxicity 1565.

Aspergillus furcicaulis

crystallization, 5- α -methyl cyclopolic acid, antimicrobial activity 8877.

Aspergillus flavum

post-harvest decay, etiology, *Manihot esculenta* 3102.

Aspergillus flavus

aflatoxin B₁, acetic acid incorporation association biosynthesis 6692.
aflatoxin B₁, contamination, *Spodoptera frugiperda* pest outbreaks, drought effects on, *Zea mays* 4887.
aflatoxins biosynthesis, antifungal activity, plant extracts, *Agave sisalana* 5645.

aflatoxins biosynthesis, association, oxygen limitations 7621.

aflatoxins biosynthesis, fatty acids effects on 6701.

aflatoxins biosynthesis, relationship, nitrification 1103.

aflatoxins, contamination, peanuts 2948.

aflatoxins contamination, *Triticum aestivum* 3872.

aflatoxins contamination, *Zea mays*, breeding effects on 3880.

aflatoxins, corn feeds contamination, rats 8494.

aflatoxins, detection, *Zea mays*, characterization 8509.

aflatoxins, kojic acid biosynthesis, cotton post-harvest decay 5648.

aflatoxins levels, conidia, sclerotia 2948.

aflatoxins levels, *Zea mays*, disease resistance 5653.

aflatoxins, occurrence, *Zea mays*, USA, Louisiana 7626.

aflatoxins production, media methodology 1101.

airborne microorganisms, respiratory tract isolates, man, hospitals, relationship, buildings construction 3493.

antifungal activity, disinfectants 4304.

antifungal activity, 1-aryl-3-(3-nitro-4-methoxyphenyl)-5-phenyl formazan, 3-aryl-5-(3-nitro-4-methoxyphenyl)-2-phenyl tetrazolium bromide 6082.

antimicrobial activity, 3-methylfurfurylidene-2-thioxo-4-thiazolidones 7960.

contamination, *Arachis hypogaea*, factors affecting 2988.

contamination, cigarettes, *Cannabis sativa* 8172.

co-metabolite alcohol, biodegradation characterization 184.

cytophagic acid biosynthesis, association chickens feeds contamination 8512.

effects on seeds germination, *Phaseolus mungo* 3924.

food contamination, Gramineae, post-harvest decay 2236.

growth, aflatoxins production, herbicides effects on 7620.

infection, *Vigna radiata* seeds, storage conditions effects on 2111.

infection, *Zea mays*, *Arachis hypogaea*, water stress effects on 5664.

infection, *Zea mays*, propionic acid effects on growth 6746.

ketoconazole, antifungal activity 3333.

kojic acid production 3648.

media (selective) 5437.

mycotoxins, food contamination, incidence, British Isles 3878.

nickel toxicity 1565.

nicotinamidenucleotide amidase, purification, characterization 6457.

nitrification, nitrogen sources, soil 9584.

phytooxins, inhibition seeds germination, *Guizotia abyssinica* 2082.

root rot, herbicides, disease control, *Arachis hypogaea* 2277.

sclerotia, aflatoxins, indole metabolites, association, evolution 3715.

soil, herbicides effects on 8707.

spores use, toxicity testing, aluminum, manganese 9076.

Aspergillus flavus, (continued)

sporulation, aflatoxin B₁ formation, rice 2946.

Aspergillus flavus-parasiticus

infection, *Avena*, acids treatment, aflatoxins biosynthesis 311.

Aspergillus foetidus

biosynthesis, 1,3- β -glucanase, 1,4- β -glucanase 1929.
pectin esterase, mechanisms 9183.
pectinesterase effects on oligo(D-galactosiduronic acids), diazomethane esterification 8251.

Aspergillus fumigatus

amphotericin B, 5-fluorocytosine, ketoconazole, miconazole, interaction, antifungal activity 1567.
antibodies, man, enzyme-linked immunosorbent assay methodology 3624.
antifungal activity, pentachloronitrobenzene metabolites 8789.
antimicrobial activity, 3-methylfurfurylidene-2-thioxo-4-thiazolidones 7960.
aspergillosis, enzyme-linked immunosorbent assay detection antibodies, man 9990.
biodegradation, *Canarium schweinfurthii*, bark 550.
carboxypeptidase A, purification, characterization 940.
cellulolytic enzymes 8261.
contamination, cigarettes, *Cannabis sativa* 8172.
dust, pigs housing 7638.
imidazoles, derivatives, antifungal activity 2480.
indirect fluorescent antibody test 8153.
infection, *Vigna radiata* seeds, storage conditions effects on 2111.
levels, waste disposal sites, composts 5292.
lignocellulose biodegradation 6641.
Manihot esculenta, single-cell protein, nutritive value, rats, pigs 2932.
mycotoxins, contamination, bread, food poisoning, man, neurological complications 2947.
post-harvest decay, *Theobroma cacao* beans fermentation 8601.
use, drug sensitivity testing, antimicrobial agents efficacy 9702.

Aspergillus glaucus

biodegradation, feeds preservation, 8-quinololin treatment 5630.
contamination, feeds, mycotoxins 3868.
distribution, feeds, radiation disinfection 7605.
food contamination, Gramineae, post-harvest decay 2236.
malathion degradation, stored products, grain 7557.
post-harvest decay, sorghum, stored products, effects on growth, *Insecta* 5799.

Aspergillus israelii

factors affecting dextranase biosynthesis 1920.

Aspergillus japonicus

biodegradation, carbohydrates, straw 8442.

post-harvest decay, prunes 5801.

Aspergillus nidulans

3-aminin, isolation, characterization 3735.
3-carboxy-2,4-diphenyl-but-2-enoic anhydride, structure, activity 8339.
cross-resistance, dioxine, association lenamolin resistance 7022.
laccase, purification, characterization 33.
mutants, chlorobenzene resistance 5151.
osmotic pressure, sensitivity, association, dicarboximide, resistance 6022.
proteinase inhibitors, isolation 2812.
proteinase, purification, characterization 6525.
pyruvate carboxylase localization methodology 8321.
quinoxalones antifungal activity 2476.

Aspergillus niger

alloformalin, physicochemical properties 766.
amino acids effects on citric acid production 5484.
antibacterial activity, carbazole derivatives 7961.
antifungal activity, [1-(carbethoxymidino)-O-alkylisouraea]copper(II) derivatives 5205.
antimicrobial activity, 3-methylfurfurylidene-2-thioxo-4-thiazolidones 7960.
biodegradation, phenoxycetic acid, benzoic acid, derivatives 6649.
biodegradation, isosaccharin, salicylic acid 3774.
calcium gluconate production, media (culture) 6608.
catalase, purification, characterization 1863.
catechol 1,2-dioxygenase, purification, kinetics 3674.
cellulase, degradation, cellulose, chemical modification 8443.
cellulase, kinetics, hydrolysis, cellulose 3789.
cellulolytic enzymes, glucose production, cotton wastes 6653.
cellulose hydrolysis, pretreatment effects on 3676.
1,8-cineole conversion 3-exo-hydroxycineole, 3-endohydroxycineole 3736.
citric acid, aluminum extraction, ash, industrial wastes 5989.
citric acid, biosynthesis 3661.
citric acid biosynthesis, aeration, agitation effects on 3644.
citric acid biosynthesis, agitation effects on 3642.
citric acid, fermentation, gluconic acid, formation 1842.
citric acid fermentation, redox potential 5469.
citric acid production, fermentation, whey 8196.
citric acid production, inhibitors 8210.
citric acid production, vitamins effects on 5468.
contamination, cigarettes, *Cannabis sativa* 8172.
contamination, tablets, pressure effects on 3459.
crown rot, herbicides, disease control, *Arachis hypogaea* 2277.
effects on calories, content, seeds, *Linum usitatissimum* 7722.
exo-1,4- α -D-glucosidase, ethanol fermentation methodology, sweet potatoes 5569.

exo-1,4- α -D-glucosidase immobilized enzymes 49

exo-1,4- α -D-glucosidase production 101

exo-1,4- α -D-glucosidase, purification, characterization 29

exo-1,4- α -D-glucosidase, purification, characterization 939

exo-1,4- β -D-xylosidase purification 1857

exo-1,4- β -D-xylosidase, purification, characterization 6462

fermentation, citric acid biosynthesis, molasses solution 5475

fermentation, purification *Beta vulgaris* dyes 7470

β -D-galactosidase, purification, substrate specificity, 8252

1,4- α -D-glucan 6- α -D-glucosyltransferase, production, assays 4657

glucose oxidase, immobilized enzymes, heat inactivation 43

glucose oxidase, use, food processing 3860

β -D-glucosidase, immobilized enzymes 48

infection, *Embilica officinalis*, ascorbic acid content 3964

infection, *Vigna radiata* seeds, storage conditions effects on 2111

leaf litter biodegradation 3771

Mentha piperata, extracts, antifungal activity 2479

metabolites, nigerazine B, structure, characterization 8338

minerals decomposition 8454

nicotinamidenucleotide amidase, purification, characterization 6457.

Aspergillus versicolor.

distribution, feeds, radiation disinfection 7605.
 radiosensitivity, dissociation food contamination 8787.
 stergiomatocystin, biosynthesis, N.M.R., acetic acid 6699
 versigleroma structure 2852
Aspergillus wentii,
 hydroxylation, fencibutrol, structure 1975.
 lignin biodegradation, Pinus, straw 171.
 metabolites, isolation, structure 6618.
Asperugin,
 synthesis, antibacterial activity, antifungal activity 2579.
Aspiration,
 systems, plant diseases epidemiology, meteorology sensors 8530.
Aspirin,
 inhibition, interferon, antiviral activity, characterization 2484.
Assays,
 aflatoxin B1 food contamination, oils 275.
 alkaline monooxygenase (FMN-linked), bacteria 9163.
 anemphedusa serum, man, use leucine dehydrogenase, *Bacillus sphaericus*,
Bacillus megaterium 6308
 antibiotics, body fluids 9724.
 azeotroam, high-pressure liquid chromatography, serum, urine 7167.
Bacillus oligotrophicus polysaccharides, mathematical models 8126.
Bacillus subtilis rec gene, detection, production DNA damage metabolites, fungi,
Streptomyces 7246
 bacteria, laminar air flow safety equipment 5332.
 bioluminescence, bacteria adenosinetriphosphatase, blood culture, use, bacteremia
 diagnosis 8125.
 cell aggregation, bacteria, association, labelling, use, palmitic acid 7245.
 Chloramphenicol 4389.
 Clostridium perfringens enterotoxins 6711.
 corn aflatoxins contamination, fluorescence, association, water content, USA,
 South Carolina 9291.
 detection, *Yersinia enterocolitica* enterotoxins, factors affecting 9307.
 endotoxins, Limulus lysate test, urea effects on 8513.
 enzymes, acetic acid, bacteria supernatants 7234.
Escherichia coli enterotoxins, Vero cells, rabbits, ileum 310.
 f-feeding, methodology, bacteria 8128.
 6-D-fructofuranosidase enzymatic activity, *Saccharomyces cerevisiae* 5490.
 Fusarium contamination, feeds 4863
 6-hydroxy-L-nicotine oxidase, 6-hydroxy-D-nicotine oxidase, *Escherichia coli*,
Anthrobacter oxidans 6531.
 identification, lactic acid bacteria 895.
 lesions, use, *Phascolus vulgaris*, pathogenicity, infection, bean common mosaic
 virus, soybean mosaic virus 8542
 methodology, yeasts mycelia dimorphism 9082.
Neisseria meningitidis endotoxins, Limulus lysate test 289.
 nitrogen fixation, Rhizobium japonicum nodulation, Glycine max, methodology 8690.
 n-propylene red reduction, fluorimetry, *Salmonella typhimurium* 5021.
 pepap, *Aspergillus aspartic protease* 8276.
 phosphoenolpyruvate-glucose phosphotransferase, *Salmonella typhimurium* 6413.
 pick test, wood decay, *Poria placenta*, *Gloeophyllum trabeum* 4182.
 poliiovirus, hepatitis A virus, use, immunoelectron microscopy 4476.
 proteolytic bacteria, soil, sludge, methodology 850.
 psychrotrophic bacteria, comparison methodology, milk 1073.
 seed-borne diseases quality control, plants pathogens 2965.
 Shigella dysenteriae antibodies, passive hemagglutination 882.
 standardization, 6-lactam antibiotics 4380.
 Typha angustata nitrogen fixation, India 7851.
 UDPacetylglucosaminine pyrophosphatase, *Candida albicans* 58.
 yeasts, cell aggregation, flocculation 7263.
 zeaxanthone contamination, corn, feeds 5644.
Astepyrene,
 biosynthesis, *Aspergillus terreus* 7456.
Athelia epiphylla,
 new records, soil, Pinus leucoderms, forests 7778.
Athelia fulvicrura,
 infection, Gramineae, pathogenesis 3933.
Athelia rolfsii,
 isolation, use, media (culture) + validamycin A 2709.
Athyrium,
 incidence, Azospirillum, rhizosphere microorganisms, tropical environment 7853.
Atichia,
 decomposition, leaf litter, Abies alba 2301.
Atkinsia ligustrina,
 host-pathogen interactions, Loranthaceae, haustoria, xylem transport 5790.
Atmosphere,
 composition, blood culture, effects on species composition, bacteria, yeasts
 3012.
 formation, autotrophic microorganisms role 8661.
 nitrogen, photochemistry, environmental impact 604.
Atmospheric conditions,
 carbon dioxide, effects on, methanogenic bacteria, methanogenesis 8715.
 controlled conditions, *Aspergillus ochraceus* ochratoxin A production 3881.
 effects on *Mycoplasma mycoides* isolation, culture 8147.
 wine storage, microorganisms growth 4877.
Atmospheric pressure,
 effects on, wort fermentation, *Saccharomyces cerevisiae* 9229.
ATP,
 activity, pesticides effects on, soils (organic) 3247.
 binding phosphoglycerate kinase, effects on structure, X-ray scattering, yeasts
 7385.
 biomass indicators, soil 5100.
 biosynthesis, *Brevibacterium ammonigenes*, adenine metabolism 7494.
 biosynthesis, *Candida boidinii*, AMP oxidative phosphorylation 1031.
 biosynthesis, *Mollicutes* 9220.
 carboxylate cations, on, *Erwinia carotovora* 2589.
 inhibition lactate dehydrogenase, *Phytophthora blakesleeana* 1905.
 interaction aspects carbamoyltransferase, *Escherichia coli* 1906.
 levels, bacteria, bioassays, luciferin 4-monooxygenase (ATP-hydrolysing) 9928.
 levels, relationship applied sludge flocculation 9799.
 levels, sewage sludge, measuring techniques, use, Photinus luciferin
 4-monooxygenase (ATP-hydrolysing) bioluminescence 7194.
 levels, soil properties, measuring techniques 568.
 production, *Rhodospirillum rubrum* capsulata chromatophores, reactors 4482.
 production, *Candida* 5537.

Subject Index

ATP, (continued)

production, *Pseudomonas paucimobilis*, soil, relationship, nitrogen levels 4218.
regeneration, chromatophores, *Rhodospirillum rubrum* 3733.
regeneration, fermentation, cytidine 5'-diphosphate choline, *Hansenula jadinii* 1960.
relationship, membrane potential, *Gossypium hirsutum*, cytodelons, blight, *Xanthomonas campestris* pv. *malvacearum* 3055.
role isoleucyl-tRNA synthetase activation isoleucine activity, *Escherichia coli* 4596.
soil, levels, soil treatment effects on 565.
soil microorganisms, soil, measuring techniques 6939.

ATP citrate (pro-3S)-lyase, purification, characterization, *Chlorobium limicola* 962.

Atrazine, biodegradation, anaerobic bacteria 2900.

Atreplex suberecta, soybean mosaic virus infection, pathogenesis 3074.

Attractants, *Megaselia halterata* oviposition, chemical composition, *Agaricus bisporus* 6661.

Augmentin, antibacterial activity 7181.
drug sensitivity testing, gram-negative bacteria, association, media factor analysis 2897.

Autographa eucalypti, leafspot, *Eucalyptus*, New Zealand 7706.

Auramycin G, isolation, characterization, antibacterial activity 1673.

Aureobasidium pullulans, enzymes, production 1852.
exo-1,4- α -D-glucosidase, growth rate, starch 6403.
Larix defoliation, association *Adelges* grazing 540.
ploidy, effects on radioresistance, U.V. radiation 2395.
polysaccharides production, batch culture, association, ammonium concentration 1970.
pullulan biosynthesis, colchicine induction 8336.
pullulan biosynthesis, fluoracetic acid effects on 6571.
pullulan production, factors affecting 2816.

Auricularia, glucans, antitumor activity, mice 7453.

Auricularia auricula-judae, glucans, antitumor activity, mice 7453.

Auromomycin, C.D., I.R. spectroscopy 2826.

Austalide D, biosynthesis, *Aspergillus ustus* 8506.

Austin, metabolites structure, N.M.R. use, *Aspergillus ustus*, *Aspergillus varicolor*, *Penicillium diversum* 4898.

Australia, *Cercospora zebrina* infection, *Trifolium subterraneum*, new records 8538.
Fragaria vesca, *Phytophthora fragariae* infection, epidemiology 3584.
Glycine max, *Phytophthora megasperma* f. sp. *glycine* infection, epidemiology 4936.
Leguminosae, *Rhizobium* isolation, characterization 6990.
Monilinia laxa infection, fruit trees 8569.
Pentas lanceolata, tomato mosaic virus infection, new records 9450.
plant viruses, reviews 8528.
plains, free range, *Eutypa armeniaca* 3900.
Pratylenchus penetrans infection, *Pinus radiata*, pathogenesis 8654.
seasonal variations, chemical control, crop production, *Uromyces appendiculatus* infestation, *Macrotilum atropurpureum* 8589.
Solanum tuberosum, potato spindle tuber viroid infection, epidemiology 5781.
Staphylococcus aureus clinical isolates, plasmas, role, antibiotic resistance 7029.
Triticum, loose smut, races, *Ustilago tritici* 3941.

Austria, alpine environments, leaf litter organic matter biodegradation, microorganisms 9556.

Autobac test, + agar, identification, *Streptococcus* group D 9908.
antibiotic sensitivity testing, *Aeromonas hydrophila* 9731.

Autographa, biological control, baculovirus 998.

Autographa californica, nuclear polyhedrosis virus, enzyme-linked immunosorbent assay detection, in vivo, in vitro 8104.

Autolytins, activity, relationship, penicillin-binding protein, β -lactam antibiotics antibacterial activity 6088.
Clostridium saccharoperbutylacetonicum, purification, characterization 1897.
deficient mutant, *Bacillus subtilis*, cycloserine bactericidal activity 4331.

Autolytins, *Candida guilliermondii*, alkanes effects on 7867.
proteinase activity, *Thermactinomyces vulgaris* 2761.

Automated methods, antibiotic sensitivity testing, bacteria 9729.

counting methods, bacteria, milk 215.
division, cell culture, bacteria 3600.
Enterobacteriaceae, identification 859.
enumeration, bacteria, mathematical models 9058.
enzyme immunoassay, gentamicin 3414.
identification, Enterobacteriaceae 9942.
identification, *Shigella*, *Salmonella* 861.
lasers nephelometry, use, bacteria antibiotic sensitivity testing 9737.

Autoredography, herpesvirus plaques, thymidine kinase levels 9838.
identification, infected protoplasts, tobacco mosaic virus, turnip yellow mosaic virus 8094.

Autotrophic bacteria, carbohydrates metabolism pathways, tricarboxylic acid cycle, enzymes 123.
nitritification, acetylene effects on 594.

Autotrophic microorganisms, role, atmosphere formation 8661.

Auxins, Cyindrocapon destructans biosynthesis, relationships, pathogenicity, *Abies alba* 4174.
Fusarium production 7491.

Auxotrophs, *Bacillus shearerthermophilus*, media (culture), amino acids 3608.

Mycobacterium smegmatis, isolation, use vancomycin 8134.
Zymomonas mobilis, media (isolation) 1788.

Auxotrophy, mutants, *Bacillus licheniformis*, bacitracin production 6172.
mutants, *Rhizobium meliloti*, adenine nutrient requirements, nodulation, *Medicago sativa* 9616.

Avellanol, *Hypocrea avellanea*, biosynthesis 6588.

Avena, *Aspergillus flavus-parasiticus* infection, acids treatment, aflatoxins biosynthesis 311.
phytopathogenic fungi infection, *Gaeumannomyces graminis* suppression, soil, effects on 3205.

Avena fatua, barley stripe mosaic virus, disease transmission, *Hordeum* 3002.
rhabdovirus infection 2118.
wheat dwarf virus infection 2120.

Avena sativa, anthracnose, *Colletotrichum graminicola* 7670.
barley yellow dwarf virus infection, effects on, *Sitobion avenae*, *Rhopalosiphum padi*, disease transmission 8553.
cells, interaction, haustoria, *Puccinia coronata* f. sp. *avenae*, ultrastructure 2136.

disease resistance genes, virulence, *Puccinia coronata* 5035.
disease resistance, *Puccinia coronata*, virulence 8610.
disease resistance, role lignin formation cellulase hydrolysis 5053.
leafspot, *Aschochyta avenae*, pathogenicity, climatic conditions 8549.
leaves, defense mechanisms, *Phenophora* trees infection 1356.
oat sterile dwarf virus infection, cytology 2164.
phytoalexins, disease resistance, crown rust, *Puccinia coronata* f. sp. *avenae* 1353.
protein biosynthesis, crown rust, *Puccinia coronata* f. sp. *avenae* 3952.
Puccinia graminis f. sp. *avenae* stem rust, virulence 9352.
rhabdovirus infection 2118.

rust, interaction, barley yellow dwarf virus, *Puccinia coronata* f. sp. *avenae*, pathology 344.

spectrophotometry, localization, avenalumin, fungi, infected, leaves 3912.
stem rust, *Puccinia graminis* f. sp. *avenae*, epidemiology, USA, Texas, Mexico 4962.

vascular system, disease spread, barley yellow dwarf virus 9342.

virulence, *Puccinia coronata* f. sp. *avenae* 3942.

Avenalumin, spectrophotometry, localization, fungi infected, leaves, *Avena sativa* 3912.

Avermectin, *Streptomyces avermectis*, inhibition reproduction, pest control, *Solenopsis invicta* 1964.

Aves, population changes, environmental impact, Dutch elm disease, *Ulmus* 6927.

Avian infectious bronchitis virus, antibody response, neutralization detection, chickens 9014.

Avian myeloblastosis virus, DNA polymerase (RNA-dependent) inhibition, retostatin antiviral activity 9794.

Avian sarcoma virus, replication, antiviral activity, aphidicolin 3341.

Avocado sunblotch disease viroid, infected leaves, *Persea americana*, RNA detection 3028.

Avoparcin, effects on bacteria growth, rumen microorganisms 8035.

Ayezuku virus, antiviral activity, ribonuclease, *Streptomyces rimosus* 2492.

17Aza-D-homoandroster-5-ene, derivatives, conversion, *Cunninghamella elegans* 6640.

17a-Aza-D-homoandroster-5-ene, derivatives, conversion, *Cunninghamella elegans* 6640.

5-Azadithiouracil, disease control, potato virus X, *Nicotiana tabacum* 2271.

Azadirachta indica, plant extracts, chemical control, *Nephotettix virescens*, vectors, rice tungro virus 7737.

Azalea, *Phytophthora* infection, incidence, greenhouses 1282.

15-Azasterol, *Saccharomyces cerevisiae*, effects on sterols biosynthesis 5203.

4-Azido-2-nitrophenylphosphate, photoaffinity labelling adenosinetriphosphatase β -subunit phosphate binding sites, *Escherichia coli* 4687.

Azicillin, antibacterial activity, *Bacteroides* 748.

antibacterial activity, conferences 9099.

antibacterial activity, *Pseudomonas* 744.

antibacterial activity, *Pseudomonas aeruginosa* 6128.

antibacterial activity, *Pseudomonas aeruginosa* 6142.

antibacterial activity, *Pseudomonas aeruginosa* 8623.

antibacterial activity, *Pseudomonas aeruginosa* 9732.

antibacterial activity, *Pseudomonas aeruginosa*, agar diffusion test 728.

antibacterial activity, *Pseudomonas aeruginosa*, Enterobacteriaceae 8847.

antibacterial activity, reviews 8848.

antibacterial activity, *Streptococcus faecalis* 8822.

antibiotic sensitivity testing, gram-negative bacilli 8001.

antibiotic synergism, aminoglycoside antibiotics, *Pseudomonas aeruginosa* 8849.

bactericidal activity, cytology, bacteria 8850.

bactericidal activity, cytology, bacteria 9753.

+cephalosporins, antibacterial activity 6148.

effects on *Pseudomonas aeruginosa* morphology 9752.

+sisonium, antibacterial activity, in vitro models 747.

Azo dyes, biodegradation, *Bacillus* 9257.

stempylolium loti, detection β -glucosidase activity 2713.

Azomones agilis, rhizosphere, crops 9583.

Azospirillum, carbon sources, factors affecting acetylene reduction 4244.

inoculation, nitrogen fixation, rhizosphere, effects on yield, *Zea mays* 9598

inoculation, relationship, *Triticum aestivum* hormones mutants yield 5944.

inoculation, relationship, *Triticum aestivum* yield 5942.

inoculation, relationship, *Zea mays* growth, yield 5943.

Bacillus, (continued)

nitrogen fixation, inoculation, yield, *Triticum aestivum*, *Triticum turgidum* 9599.
 nitrogen fixation, rhizosphere, *Ipomoea batatas* 9594.
 nitrogen fixation, soil isolates, *Diplazone fusca* rhizosphere microorganisms 592
 nitrogen fixation, soils (saline), India 7840.
 physicochemical properties, nitrogen fixation, association, Gramineae 5941.
 typical environment plants rhizosphere microorganisms, identification, incidence 7853

Bacillus, (continued)

acetylene reduction, *Pennisetum americanum* 385.
 nitrogen role, nitrogen nutrition, *Triticum aestivum*, Zea mays 7011.
 continuous culture, oxygen tension effects on, carotenoids.
 poly- β -hydroxybutyric acid, superoxide dismutase, fumarate reductase (NADH) biosynthesis 2749.
 infection, *Trifolium repens*, *Medicago sativa*, *Cicer arietinum*, effects on, nodulation, yield 2226.
 inoculation, *Sorghum bicolor* seedlings roots, carbon compounds exudates 4243.
 nitrogen fixation, association *Setaria italica* life cycle 8702.
 nitrogen fixation, inoculation, rhizosphere, yield, *Triticum aestivum* 9602.
 nitrogen fixation, nitrogen-15 dilution, rhizosphere, *Triticum aestivum* 9587.
 nitrogen fixation, rhizosphere, orchards, *Artocarpus heterophyllus*, *Areca* 9595.
 nitrogen sources effects on acetylene reduction 7838.
 nitrogenase, purification, characterization, nitrogen fixation 6505.
 Rhizobium, association, *Cicer arietinum*, nitrogen fixation 5963.
 rhizosphere microorganisms, role, nitrogen nutrition, *Triticum aestivum* 7006.
 rhizosphere, nitrogen fixation, yield, *Azotobacter chroococcum*, Zea mays 1500.
 role, nutrient uptake, roots, Zea mays, *Sorghum bicolor* 6988.

-carbamoyl dehydrogenase, purification, characterization 5527.
Bacillus lipoferrum,

nitrogen fixation, rhizosphere, orchards, *Artocarpus heterophyllus*, *Areca* 9595.

antibiotics, antifungal activity, fungi 5933.
 extracellular polymers, carbohydrate composition 1958.

plant applications effects on seeds microflora, *Glycine* max 5671.
 nickel sulfate effects on nitrogen fixation 2368

nitrogen fixation, rhizosphere, orchards, *Artocarpus heterophyllus*, *Areca* 9595.
 nitrogen fixation, sodium molybdate effects on 3233.

nitrogen fixation, use fertilizers 607.
 oat, biodegradation, anaerobic conditions, C/N ratios 9264.

phytotoxins, allelopathy, *Polygonum aviculare* 8663.
 rhizosphere, nutrient sources, soil 7823.

rhizosphere, crops 9583.
 rhizosphere microorganisms, Gramineae crop rotation effects on 623.

soil microorganisms, pesticides, toxicity 4253.
 solar eclipse effects on nitrogen cycle 2370.

Bacillus beijerinckii,

rhizosphere microorganisms, role, nitrogen nutrition, *Triticum aestivum* 7006.
 rhizosphere chroococcum,

Aspergillus awamori, composts enrichment 7799.
 benzyl viologen inactivation glutamine synthetase 1869.

growth, rhizoplane, Zea mays, *Gossypium hirsutum*, *Triticum aestivum* 3195.
 identification, isolation, *Eichhornia crassipes* 3056.

inoculation, plants seeds, effects on yield 7800.
 nitrogen fixation, seed treatments, effects on yield, *Cyperus rotundus* 8677.

nitrogen fixation, seeds inoculation, Zea mays 4233.
 nitrogen fixation, soil inoculation, nitrogen sources, Zea mays 4232.

nitrogen-fixing bacteria, *Cyperus rotundus* 5948.
 rhizosphere, nitrogen fixation, yield, *Azotobacter chroococcum*, Zea mays 1500.

soil distribution 5934.
 stimulation seeds germination, Zea mays, *Gossypium hirsutum*, *Triticum aestivum*

3194.
Bacillus pascalis,

nitrogen fixation, rhizosphere, nitrogen-15, measuring techniques, *Paspalum*

notatum 9609
Bacillus vinelandii,

antibiotic resistance mutants, nitrogen fixation 9618.
 continuous culture, alginate acid biosynthesis, enzymes analysis 9129.

continuous culture, sea water 8069.
 inoculation, *Sorghum bicolor* seedlings roots, carbon compounds exudates 4243.

succinate dehydrogenase (NADP⁺), purification 6534.
 IAD(P⁺) transhydrogenase, quaternary structure, subunit association 60.

nitrogen fixation enhancement, molybdenum 3211.
 nitrogen fixation inhibition, nitrite association 5124.

nitrogenase iron protein, iron-sulfur centers content, activity 7420.
 nitrogenase, redox properties 9162.

nitrogenase, redox properties 9162.
 nitrite nucleotide transhydrogenase multiple forms, oxygen effects on 6405.

superoxide dismutase, redox-potential 4588.
Brethmann,

antibacterial activity 777.
 antibacterial activity, gram-negative bacilli 7815.

antibacterial activity, gram-negative bacilli 6203.
 antibacterial activity, gram-positive bacteria, gram-negative bacteria 7124.

Brethmann,
 antibacterial activity 8811.

antibacterial activity, gram-negative bacilli 7983.
 antibacterial activity, *Neisseria gonorrhoeae* 3401.

assays, high-pressure liquid chromatography, serum, urine 7167.
 comparison, antibacterial activity, gram-negative bacteria 8816.

Brethmann,
 coordination geometry, copper active sites, Raman spectroscopy, *Pseudomonas*

aeruginosa 9.
 I.M.R., *Alcaligenes faecalis* 920.

Brethmann,
 uptake, mycotoxins, poisoning, cattle 2944.

Brethmann,
 aluminum phosphate solubilization, acid production 5891.

antagonists, use, disease control, *Lycopersicon esculentum*, *Citrus* vulgaris,
Fusarium wilt 135.

antibacterial activity, antibiotic Ro 22-5417 6201.
 antibacterial agents, quinazolinones 5186.

azo dyes biodegradation 9257.
 bacteria growth, association carbon 8069.

Bacillus, (continued)

biodegradation, odor compounds, skatole, indole, butyraldehyde 5580.
 biodegradation, phospholipids, triacylglycerols, cholesterol 2861.

biodegradation, surfactants, in vitro 8432.
 cell culture biochemical properties, freeze drying 8368.

contamination, cotton 1320.
 contamination, food industry, sugars 184.

contamination, milk, buffaloes 7576.
 deoxyribonuclease, ribonuclease, purification, characterization 1937.

detection, media (selective) methodology, association, food contamination 5416.
 digestion (anaerobic), animal wastes, pigs 5301.

distribution, feeds, radiation disinfection 7605.
 factors affecting, growth, reactors, methodology 1794.

facturymycin antibacterial activity 3436.
 fermentation, *Pentatlethra macrophylla* seeds 6675.

food contamination, luncheon meat, factors affecting spoilage 2029.
 genetic engineering, production, enzymes, toxins 987.

β -glucanase effects on ethanol fermentation 1993.
 gold, biogeochemistry 7013.

heat resistance, dairy products, incidence 4814.
 hexamine biodegradation 7559.

α -hydroxy acid production 2743.
 iturin A, structure, N.M.R., mass spectroscopy 9774.

lactic acid fermentation, vegetables 5607.
 medical dressings contamination 8073.

methanogenesis, inoculation, enumeration, digestion (anaerobic), crop residues
 7197.

microwave radiation sterilization, culture systems plastics 708.
 n-nitrophenol biodegradation 2013.

parathion hydrolysis, soil 160.
 purification, industrial effluents, wastewater treatment 793.

pyruvate dehydrogenase multienzyme complexes, purification, characterization
 4645.

rhizosphere microorganisms, role, nitrogen nutrition, *Triticum aestivum* 7006.
 role, nitrogen fixation, Brazil soil 5961.

soft rot, tubers, *Solanum tuberosum* 5752.
 species, wetwood etiology, *Ulmus americana* 8657.

spoilage, luncheon meat, shelf life 4872.
 spores, ethylene oxide resistance 2412.

spores preservation, use, ethanol 2699.
 spores, pressure isolation 5417.

+ *Streptomyces propurpuratus*, neopurpuratin production, factors affecting 5561.
 use, *Chaetomium olivaceum* biological control, *Agaricus bisporus* 3052.

xylan biodegradation, xylanase biosynthesis 1060.
Bacillus amyloliquefaciens,

chemotaxis, endo-1,3(4)- β -D-glucanase production 2808.
 glycine, association, enhancement, α -amylase, production 8296.

Bacillus anthracis,
 antibiotic sensitivity testing, use, immunofluorescence, methodology 1605.

arginine, purification, characterization 6483.
 immunoglobulin G antibody response, immune serum, enzyme immunoassay detection,

rabbits 855.
 plants extracts antibacterial activity, Iran 2458.

plasmids, genetic control, toxins, production 2085.
 spores comparison, *Bacillus cereus*, immunofluorescence methodology 9897.

spores, counting methods, immunofluorescence 3573.
Bacillus brevis,

antimicrobial activity, 3-methylfurfurylidene-2-thioxo-4-thiazolidones 7960.
 edeine F biosynthesis, isolation, characterization 8917.

gramicidin biosynthesis, formic acid, ethanolamine, production 774.
 gramicidin S biosynthesis, association, oxygen content, media 6225.

gramicidin S biosynthesis, media oxygen content effects on 6226.
 gramicidin S deliviant, mutant, phenylalanine metabolism transfer, gramicidin S

synthetase activity 8207.
 gramicidin S synthetase, sulfhydryl groups chemical modification 6494.

gramicidin S, tyrocidine A, antibacterial activity 2424.
 Helianthus annuus sesquiterpenes lactones antimicrobial activity 7953.

intracellular serine proteinase, association, sporulation, purification,
 characterization 36.

serine proteinase, isolation, characterization 8281.
 spores viability, gramicidin S biosynthesis, storage+freeze drying effects on

9783.
 sporulation, serine proteinase, biosynthesis 6545.

Bacillus cadaveris,
 lysine decarboxylase, mechanisms, stereospecificity 6533.

ornithine decarboxylase, lysine decarboxylase, arginine decarboxylase,
 stereochemistry, *Escherichia coli* 6506.

Bacillus cereus,
 adenosine (phosphate) deaminase, adenosine phosphorlyase, substrate specificity

1934.
 β -amylase production 7317.

β -amylase, purification, characterization 8301.
 antibacterial activity, *Allium sativum* extracts 1549.

antibacterial activity, aminoacyl-cabazole derivatives 3330.
 antibacterial activity, sorbic acid, pH 7065.

cell culture, oxygen, penetration, measuring techniques 6341.
 contamination, goats meat, frozen foods 5506.

contamination, toxigenicity, infants food 8464.
 deoxyribonuclease I, purification, characterization 8238.

deposition, glass capillary, mathematical models 9884.
 DNA dependent adenosinetriphosphatase, purification, characterization 8264.

effects on corn meals, nutritive value 251.
 food contamination, cooking, sanitation, kitchens 213.

growth, food contamination, beans 219.
 identification, methodology 5419.

β -lactamase isoenzymes, fractionation, chromatofocusing 9165.
 β -Lactamase, phenylglyoxal inactivation 948.

lactoferrin, transferrin, interaction, nitrite, inhibition, sporulation 3329.
 neomycin antibacterial activity standardization 8855.

phosphatidylinositol specificity phospholipase C 8235.
 phospholipase C 8237.

proteinase, diffusion tests 1935.
 prymycin biosynthesis 4423.

spores comparison, *Bacillus anthracis*, immunofluorescence methodology 9897.
 spores, counting methods, immunofluorescence 3573.

spores, dimethyl sulfoxide, EDTA, effects on antibacterial activity,

Bacillus cereus, (continued)

- formaldehyde, hydrogen peroxide 8772.
- spores, germination, heat resistance, association, diarrhea, emetics, food contamination, man 193.
- spores preservation, use, ethanol 2699.
- tetramethyl pyrazine biosynthesis 1983.

Bacillus circulans,

- α -amylase, purification, characterization, starch hydrolysis 6520.
- α -amylase purification, use, maltohexaose production 80.
- antibiotic Bu-2470, structure 8889.
- biosynthesis, antibiotic Bu-2470, physicochemical properties 8888.
- β -D-galactosidase, immobilized enzymes, activity, physicochemical properties 5315.
- kanamycin A metabolism, amikacin biosynthesis 6157.
- phosphate solubilization, organic acids, soil 3187.
- phosphate solubilization, soil 3214.
- phosphate solubilization, uptake, *Oryza sativa* 3188.

Bacillus coagulans,

- endo-1,4- β -D-xylanase, exo-1,4- β -D-xylidase, physicochemical properties 4665.
- glyceraldehyde-phosphate dehydrogenase, structure, X-ray crystallography 72.
- peritrichous structure, linkage galactosylglycerol phosphate 5532.

Bacillus diptheriae,

- synthetic detergents antimicrobial activity 7958.

Bacillus firmus,

- α -D-glucosidase, biosynthesis, activity 9168.
- indole-3-acetic acid biosynthesis, *Oryza sativa* yield, soils (acid), India 4225.
- phosphate solubilization, organic acids, soil 3187.
- phosphate solubilization, soil 3214.

Bacillus fragilis,

- cefotetan antibacterial activity 7138.
- β -lactamase inhibitors, cephalosporins synergism 6133.

Bacillus globigii,

- spores inactivation, microwave radiation, aerosols 9706.

Bacillus intermedius,

- ribonuclease, antiviral activity, pseudorabies virus, foot-and-mouth disease virus 6077.
- ribonuclease, conformational analysis, tryptophan residues 2768.
- ribonuclease, use oligonucleotides synthesis, kinetics, companion immobilized enzymes 8284.

Bacillus licheniformis,

- α -amylase production, carbon sources, oil cake 1850.
- α -amylase, purification, characterization 7375.
- antibiotic resistance 9642.
- bacitracin biosynthesis 761.
- bacitracin biosynthesis, relationship sporulation 8965.
- bacitracin effects on bacitracin biosynthesis 6173.
- bacitracin production, auxotrophy mutants 6172.
- fructose-bisphosphatase, purification, characterization 6410.
- membranes ribosomes, biosynthesis, α -amylase, α -D-glucosidase 8295.
- milk-clotting enzymes, biosynthesis, characterization, immobilization 4613.
- 6-phosphofructokinase, purification, stabilization 6435.
- serine proteinase, purification, characterization 6490.

Bacillus macerans,

- β -1,3-glucan-glucanohydrolase effects on ethanol fermentation 1993.

Bacillus megaterium,

- α -amylase, β -amylase, characterization 1910.
- antibacterial activity, β -hydroxythioesters derivatives 8752.
- antibiotic resistance development 6020.
- antimicrobial activity, 3-methylfurfurylidene-2-thioxo-4-thiazolidones 7960.
- bacteriocins, companion, megaon A 8044.
- citrate synthase, purification, characterization 7396.
- constitutive mutant, penicillin amidase biosynthesis 2802.
- contamination, tablets, pressure effects on 3459.
- flavoprotein-linked monooxygenase induction 8322.
- glucose dehydrogenase, proteolysis 8273.
- leucine dehydrogenase, use aminopeptidase assays, serum, man 6308.
- penicillin amidase, activity mechanisms, conferences 9159.
- phospho-N-acetyluracimyl-pentapeptide-transferase, role, peptidoglycans biosynthesis, amphotericin, inhibition 1561.
- poly- β -hydroxyalkanoate, purification, characterization 2846.
- proteinase biosynthesis suppression, temperature role 7425.
- protoplasts, gramicidin S lysis 2577.
- spores, disulfide reductase isolation, purification, characterization 1878.
- spores, heat resistance, chemicals resistance, association, phosphate media 3280.
- spores preservation, use, ethanol 2699.

Bacillus megaterium pv. cereales,

- blotch, *Triticum aestivum* 1152.

Bacillus mesentericus,

- proteinase, amino acid composition, zinc content, carbohydrate composition 5522.
- proteinase, purification, characterization 951.

Bacillus mycolides,

- antibacterial activity, aminocycl-cabazole derivatives 3330.

Bacillus oligonitrophilus,

- polysaccharides assays, mathematical models 8126.

Bacillus polymyxa,

- antibacterial activity, antibiotics, biosynthesis, *Streptomyces tendae* 8878.
- 2,3-butyleneglycol production 1040.
- nitrogen fixation, nitrogen-15 dilution, rhizosphere, *Triticum aestivum* 9587.
- role, nitrogen fixation, Brazil soil 5961.
- tannase, tannin decomposition 5600.

Bacillus pumilus,

- amicrococcin biosynthesis, antibacterial activity 2586.
- amicrococcin structure 4402.
- antimicrobial activity, 3-methylfurfurylidene-2-thioxo-4-thiazolidones 7960.
- compound Al-77s, analogs, structure 6627.
- endo-1,4- β -D-xylanase, purification, characterization 8299.
- exo-1,4- β -D-xylidase, purification, characterization 6436.
- γ radiation sterilization, medical importance 9707.
- tannase, tannin decomposition 5600.

Bacillus schlegelii,

- hydrogenase isolation, purification, characterization 4670.

Bacillus sphaericus,

- antibiotic resistance 9642.
- antibiotic control, *Culex quinquefasciatus* 2836.
- biological control, heat inactivation, larvae, *Anopheles stephensi* 6612.

Bacillus sphaericus, (continued)

- biological control, larvae, Culicidae 6611.
- biological control, pathogenicity, animals 4711.
- biological control, persistence, aquatic environment, Culicidae 1024.
- biothin overproduction 8381.
- cell culture, biological control activity, *Aedes aegypti* larvae 7486.
- cell culture, biological control activity, *Aedes aegypti* larvae 8349.
- cell disruption, methodology glass beads 6337.
- growth, sporulation, agricultural products media 9041.
- leucine dehydrogenase, use aminopeptidase assays, serum, man 6308.
- penicillin amidase, purification, characterization 4612.
- powder production, biological control, *Insecta* 1023.
- spores, spore crystals, toxicity, pest control, *Culex quinquefasciatus* 1035.
- toxicity, histopathology, larvae, *Culex fatigans* 8363.
- toxins, extraction, spores 5662.
- toxins, histopathology, midgut, Culicidae 1022.

Bacillus stearothermophilus,

- acetate kinase, purification, characterization 6423.
- auxotrophs, media (culture), amino acids 3608.
- bioassays, β -lactam antibiotics, milk 720.
- bioassays, β -lactam antibiotics, milk 721.
- elongation factor Tu, interaction elongation factor Ts, *Escherichia coli* 3641.
- glyceraldehyde-phosphate dehydrogenase, NAD⁺ binding 6475.
- glycerol kinase, purification 8266.
- nitrate reductase, purification, characterization 2804.
- phosphogluconate dehydrogenase (decarboxylating), purification, characterization 4638.
- phosphoglycerate kinase, purification, characterization 6418.
- pullulanase biosynthesis 5509.
- ribosomal subunit 50S, crystal structure, electron microscopy 4563.
- spores, dipicolinic acid activation, counting methods 3612.
- spores, heat inactivation, soybean milk 207.
- thermophilic microorganisms, α -amylase biosynthesis 1913.
- tyrosyl-tRNA synthetase, purification 933.
- tyrosyl-tRNA synthetase, amino acid sequence 6532.

Bacillus stearothermophilus var. calidolactis,

- antibiotic sensitivity testing 5180.

Bacillus subtilis,

- Achatina fulica*, mucin, antibacterial activity 5185.
- S-(2-aminoethyl)-L-cysteine resistant mutant, L-lysine excretion 9122.
- α -amylase, dextranase, poly(anions) inhibition kinetics 79.
- α -amylase, exo-1,4- α -D-glucosidase, xylose isomerase, immobilization, use, Sepharose-6MB 9147.
- α -amylase immobilized enzymes 49.
- α -amylase, immobilized enzymes, activity, association, starch, non-linearity 9134.
- α -amylase production, continuous culture 2794.
- α -amylase, purification, characterization, α -amylase inhibitor inhibition 4629.
- α -amylase, purification, kinetics, chemical composition 9143.
- antibacterial activity, *Chromobacterium violaceum* antibiotic Y-T0678H 9768.
- antibacterial activity, aminocycl-cabazole derivatives 3330.
- antibacterial activity, antibiotics, biosynthesis, *Streptomyces tendae* 8878.
- antibacterial activity, shikonicin- β , β -dimethylacrylate, *Alkanna hirsutissima* 7081.
- antibacterial activity, sorbic acid, pH 7065.
- antibacterial activity, *Streptococcus lactis* bacteriocins 8025.
- antibacterial activity, *Streptomyces melanoviridius* antibiotic DC-52 8344.
- antibacterial activity, synthetic gramin 8884.
- antibacterial activity, tetrocarcin A 7178.
- antibacterial agents stress injury, growth delay analysis 9033.
- antibiotic resistance development 6020.
- antibiotic sensitivity testing, antimicrobial agents 5233.
- antimicrobial activity, O,O-dialkylthiophosphoric acid, O,O-dialkylidithiophosphoric acid, derivatives 7955.
- antimicrobial activity, pectinase 8910.
- autolysins deficient mutant, cycloserine bactericidal activity 4331.
- binding, metals, conversion 4257.
- biological indicator species, drug sensitivity testing 6039.
- biodegradation, p-aminocobenzene 2006.
- cefuroxim, antibacterial activity 1612.
- cell membranes, adenosinetriphosphatase N,N'-dicyclohexylcarbodiimide binding subunits, purification, characterization 2833.
- cell membranes, DNA-binding protein, purification, characterization 9121.
- colofact, effects on, membrane permeability 6053.
- 3'-5'-cyclic-nucleotide phosphodiesterase inhibitor, activity mechanisms 7305.
- 3'-5'-cyclic-nucleotide phosphodiesterase inhibitor, isolation, amino acid sequence, lactones linkage localization 7304.
- 3'-5'-cyclic-nucleotide phosphodiesterase inhibitor isolation, fatty acid composition 7303.
- daunorubicin, adriamycin, antibacterial activity, structure-activity relationships 4404.
- 2,4-dimethyl-1-cyclohexanol hydrolysis, use production 2,4-dimethyl-1-cyclohexanones 1985.
- DNA biosynthesis, RNA biosynthesis, protein biosynthesis, parabens, effects on 7120.
- effects on corn meals, nutritive value 251.
- elastase, purification, characterization 1902.
- endo-1,3- β -D-xylanase, isolation, characterization 7378.
- exo-1,4- α -D-glucosidase bioassays 4681.
- fructose-bisphosphate aldolase, purification, characterization 6428.
- fungicides, biological control, white rot, *Allium cepa*, seed treatments 4103.
- glucose-6-phosphate dehydrogenase, purification, characterization 4635.
- gramicidin S, tyrocidine A, antibacterial activity 2424.
- growth rate, α -amylase production 2795.
- histology stains, scanning electron microscopy 866.
- immobilized cells, biosynthesis, proinsulin 4562.
- immobilized cells, viability 854.
- inhibition, rust, *Uromyces phaseoli*, biological control, *Phaseolus vulgaris* 9498.
- inhibitors, 3'-5'-cyclic-nucleotide phosphodiesterase, physicochemical properties 7176.
- β -D-mannosidase, viscosity, spectrophotometry 1901.
- membrane vesicles, NADH dehydrogenase, purification, characterization 966.
- mutants, inosine biosynthesis, 5'-nucleotidase use 122.
- mutants, sporulation, rifamycin, antibiotic resistance 7901.

Bacillus subtilis, (continued)

- mycobactin, purification 767.
neomycin antibacterial activity standardization 8855.
ornithine carbamoyltransferase, purification, characterization 7382
phosphate solubilization, organic acids, soil 3187.
phosphate solubilization, soil 3214.
phosphate solubilization, uptake, *Oryza sativa* 3188.
6-phosphofructokinase, purification 949.
3-phytase, purification, characterization 30.
plasmids, acridine orange effects on polyglutamic acid biosynthesis 1846.
poly(glutamic acid) biosynthesis, genetic control 911.
potato harvest decay, etiology, *Manihot esculenta* 3102.
proteases, cheese ripening 4730.
protease, denaturation kinetics 1891
pyrimidines biosynthesis, imidazole acetyltransferase, glucosylmycin inhibition 8014.
pyruvate dehydrogenase multienzyme complexes, purification, characterization 5524.
radioresistance mutants, isolation, characterization 7027.
rec gene assays, detection, production DNA damage metabolites, fungi.
Streptomyces 7246.
ribosomes, relationship, RNA polymerase, biosynthesis 1940.
seed treatments, disease control, white rot, *Allium cepa* 5848.
serine proteinase, purification, characterization 7416.
spores, bioassays, antimicrobial agents, urine 9708.
spores preservation, use, ethanol 2699.
spores, resistance, glutaraldehyde, sodium hypochlorite, iodine 5177.
sporethrichin resistance 9643.
subtilisin, conformation, C.D., fluorescence 90.
subtilisin, conformation, pH urea effects on, C.D., fluorescence, kinetics 89
subtilisin, ethanol, glycerol, sucrose stabilization 5503.
teichoicase, purification, characterization 7403.
teichoicase, purification, physicochemical properties 957.
undecaprenyl pyrophosphate synthetase, geranylgeranyl pyrophosphate synthetase, purification, characterization 1916.
use, biological control, Sclerotium cepivorum white rot, *Allium* 6592.
waste water contamination, U.V. radiation disinfection 3472.
- Bacillus subtilis subsp. niger,**
indicator species, ethylene oxide sterilization, factors affecting 4322.
- factors affecting, sporulation, resistance, ethylene oxide 9705.
secondary alcohols biosynthesis 3755.
- Bacillus thermoproteolyticus,**
protease, unfolding mechanisms 4680.
- Bacillus thiaminolyticus**
thiamin pyridinylase, purification, characterization 8257.
- Bacillus thuringiensis,**
aerial applications, role, interaction, *Apanteles melanoscelus*, *Lymantria dispar* 3722.
antibiotic resistance 661.
+ *Apanteles melanoscelus*, pathogens, biological control, *Lymantria dispar* 2832.
biological control, *Aedes taeniorhynchus*, salt marshes 7451.
biological control, *Anopheles atroparvus*, *Culex pipiens*, *Culex molestus* 4712.
biological control, *Anopheles quadrimaculatus*, paddy fields, *Oryza sativa* 6601.
biological control, *Bacillus sphaericus* mortality 2850.
biological control, *Culex quinquefasciatus* 2836.
biological control, *Culex tarsalis*, paddy fields, *Oryza sativa* 6599.
biological control, *Dorycteria amatella*, persistence, *Pinus taeda* 7484.
biological control, disease control, *Simulium damnosum*, vectors 1020.
biological control, field trials, *Culicidae* 1030.
biological control, field trials, larvae, *Simulium damnosum* 6609.
biological control, field trials, *Simulium soubrense-santipauli* 1026.
biological control, foliar applications, *Choristoneura fumiferana* 6614.
biological control, insecta, developing countries, research programs 1027.
biological control, larvae, *Culicidae* 6600.
biological control, *Lymantria dispar*, *Dendrolimus spectabilis*, *Hyphantria cunea*, dose-response effects, mathematical models 8362.
biological control, *Lymantria dispar*, parasitism, *Rogas lymantriae* 7477.
biological control, Noctuidae 5559.
biological control, *Ostrinia nubilalis* 8375.
biological control, pathogenicity, animals 4711.
biological control, *Pieris rapae*, *Trichoplusia ni*, *Brassica oleracea*, crop fields 6596.
biological control, *Spodoptera flugiperda* 5550.
biological control, *Spodoptera lituralis* 9224.
biological control, sprays, *Choristoneura fumiferana* 7488.
biological control, sprays, *Choristoneura fumiferana* 8350.
biological control, *Stilpnolia salicis* 3718.
biological control, *Thuricide 16B*, *Dipel 88*, *Choristoneura fumiferana* 9222.
cell culture, biological control activity, *Aedes aegypti* larvae 7486.
cell culture, biological control activity, *Aedes aegypti* larvae 8349.
compatibility, capitan, pest control, *Ephestia cautella*, *Plodia interpunctella*, stored products 7485.
compatibility, capitan, pest control, *Ephestia cautella*, *Plodia interpunctella*, stored products 8351.
crystals, biological control, *Aedes aegypti* larvae, potassium carbonate effects on 4717.
8-endotoxin, amino acid sequence 4911.
8-endotoxin, biological control, histopathology, larvae, *Aedes aegypti* 1019.
8-endotoxin, cytotoxicity, biological control, *Culicidae* 1018.
8-endotoxin, monoclonal antibodies production, hybridoma 305.
8-endotoxin production, media methodology 3888.
8-endotoxin, stability, toxicity, use biological control, *Culicidae* 294.
endotoxins, antigenic characteristics 3720.
endotoxins, pathogenicity, biological control, *Achaea janata* 1038.
endotoxins, susceptibility, geographical variations, *Anopheles stephensi*, *Aedes aegypti*, *Aedes albopictus*, India 293.
8-oxo-2-oxo, detection, high-performance liquid chromatography 6725.
genes, 8-endotoxin 1107.
isolates, comparison, virulence, biological control, *Choristoneura fumiferana* 8379.
larvicides, equipment, pesticide applications, methodology, *Culicidae* 9204.
pathogenicity, environmental effects, *Culex pipiens*, *Aedes aegypti* 295.
pathogenicity, mortality, biological control, *Glossina pallidipes* 984.
pathogenicity, pest control, *Culicidae* 296.
pathogens, biological control, *Insecta* 999.

Bacillus thuringiensis, (continued)

- persistence, biological control, *Culex pipiens* 1008.
pest control, biological control, *Culicidae* 297.
phosphatidylinositol specificity phospholipase C 8235.
phospholipase C, purification, characterization 8242.
proteins, detection, enzyme-linked immunosorbent assay 3561.
spores+crystals complex, exotoxins effects on *Ostrinia nubilalis* 7489.
spores, persistence, leaves, biological control, *Lepidoptera* 1006.
spores, persistence, soil, biological control, *Insecta* 1007.
sterilization, temperature, time effects on 4323.
storage, biological control, larvae, *Simulium damnosum*, tropical environment 6610.
subsp. *israelensis*, spores, viability, toxicity, biological control, *Aedes aegypti* 4713.
toxicity, larvicides, factors affecting, *Culex quinquefasciatus*, *Aedes aegypti*, *Anopheles albimanus*, *Anopheles quadrimaculatus* 8380.
toxins, pathogenesis, *Bombyx mori* larvae midgut cells 3738.
toxins, use biological control, *Insecta* 5564.
- Bacillus thuringiensis subsp. entomocidus,**
8-endotoxin, purification, characterization 7641.
- Bacillus thuringiensis subsp. israelensis,**
biological control, *Psorophora columbiae*, paddy fields, *Oryza sativa* 6597.
biological control, *Simulidae*, streams 6602.
8-endotoxin, biological control, *Culicidae* 5553.
treatment, pathogenesis, *Aedes aegypti* larvae 3721.
biological control, *Culicidae* larvae, association plasmids 2842.
- Bacillus thuringiensis subsp. kurstaki,**
toxicity, *Platynota idaeusalis* larvae, association formaldehyde dietary intake 7498.
- Bacillus thuringiensis subsp. thuringiensis,**
culture, aeration induction phages *Iyiss* 6314.
- Bacillus thuringiensis var. galleriae,**
radioresistance mutants, isolation, characterization 7027.
- Bacillus thuringiensis var. israelensis,**
pathogens, temperature effects on, biological control, *Culex pipiens molestus* 2075.
toxins biosynthesis, factors affecting, association, *Culicidae* larvae lethality 306.
- Bacillus vitellinus,**
alkaline phosphatase, purification, characterization 3700.
- Bacitracin,**
Bacillus stearothermophilus var. *caldolactis* antibiotic sensitivity testing 5180.
binding, DNA, physicochemical properties 7157.
biosynthesis, *Bacillus licheniformis* 761.
biosynthesis, relationship *Bacillus licheniformis* sporulation 8665.
effects on bacitracin biosynthesis, *Bacillus licheniformis* 6173.
production, *Bacillus licheniformis*, auxotrophy mutants 6172.
- Bactec test,**
blood culture, bacteria isolation 9950.
detection, bacteria contamination, antibiotics fermentation, *Penicillium*, *Streptomyces* 8824.
detection, blood culture bacteremia 9899.
- Bacteremia,**
anaerobic bacteria, blood isolation methodology, centrifugation+filtration 9946.
blood culture, detection, Bactec test 9899.
diagnosis, bacteria volatiles urine, gas chromatography, man 6315.
diagnosis, blood culture, antimicrobial agents adsorption, man 836.
diagnosis, blood culture methodology, man 860.
diagnosis, *Haemophilus influenzae* detection, media (culture), children 9934.
diagnosis, use, blood culture, bacteria adenosinetriphosphatase bioluminescence assays 8125.
man, gingiva, povidone-iodine treatment 815.
- Bacter**
acetic acid media (enrichment) 9880.
acetylene reduction, conversion factors, comparison, nitrogen fixation, soil, water content, nitrogenase activity, effects on 7005.
activated sludge, extracellular polymers, heavy metals adsorption 1690.
activated sludge, heavy metals tolerance, copper bioaccumulation, wastewater treatment 6246.
activity, activated sludge, relationship, sewage mercury concentration 8943.
activity, *Cuscuta* seeds germination inhibition 8577.
activity, sewage purification 8962.
adenosinetriphosphatase, bioluminescence assays, blood culture, use, bacteremia diagnosis 8125.
adherence, plastics 3492.
aerosols, characterization, factors affecting viability, reviews 8115.
alkanal monooxygenase (FMN-linked), assays 9163.
alkanal monooxygenase (FMN-linked), heat inactivation 6479.
amino acids production, fermentation, genetic engineering 9117.
ammonification, USSR soil 7808.
 α -amylase activity determination, methodology 7401.
 α -amylase use, starch fermentation, glucose biosynthesis 4699.
analysis, water springs 9615.
animal isolates, pigs urinary tract, chemotherapeutics, drug sensitivity testing 2464.
antagonism, *Gaeumannomyces graminis* infection, *Triticum aestivum* roots 3008.
antagonism *Phellinus weirii*, forests 2298.
antagonists, interaction, *Gaeumannomyces graminis* var. *tritici*, clays effects on 4159.
antibacterial activity, β -lactam antibiotics 4340.
antibacterial activity, acylureidopenicillins, antibiotic antagonism, cephalosporins 6144.
antibacterial activity, antibiotics+ethanol 1558.
antibacterial activity, erythromycin, carbon dioxide effects on 3420.
antibacterial activity, *Heliclymus plicatus* extracts 2443.
antibacterial activity, hematophorin, bonellin 6048.
antibacterial activity, nalidixic acid analogs 5187.
antibacterial activity, penicillins, clinical aspects 6150.
antibacterial activity, pyridonecarboxylic acid derivatives 5190.
antibacterial activity, tinosine antibiotics 3424.
antibacterial agents, feeds additives, residues analysis, livestock 252.
antibacterial agents, iremycin 3438.
antibacterial agents stress injury, growth delay analysis 9033.
antibiotic resistance 9640.
antibiotic resistance 9641.

Subject Index

Bacteria, (continued)

antibiotic resistance, aminoglycoside antibiotics, clinical aspects, dosage frequency effects on 6002.
antibiotic resistance, aminoglycoside antibiotics, clinical aspects, conferences 5366.
antibiotic resistance, aminoglycoside antibiotics, epidemiology, plasmids association, France 6006.
antibiotic resistance, aminoglycoside antibiotics, incidence, Switzerland, clinical surveys 6003.
antibiotic resistance, aminoglycoside antibiotics, role enzymes inactivation mechanisms 6005.
antibiotic resistance development 6020.
antibiotic resistance, epidemiology 9647.
antibiotic resistance, pathogenicity 2415.
antibiotic resistance, relationship antibiotics treatment, prophylaxis 7881.
antibiotic resistance, role, plasmids 6117.
antibiotic resistance, septicemia, man 645.
antibiotic sensitivity testing 6111.
antibiotic sensitivity testing 7984.
antibiotic sensitivity testing, antibacterial activity quantitation methodology association 5239.
antibiotic sensitivity testing, antimicrobial agents 5233.
antibiotic sensitivity testing, automated methods, micromethods 9729.
antibiotic sensitivity testing, British Isles 2463.
antibiotic sensitivity testing, cefotetan 4352.
antibiotic sensitivity testing, computer applications 9739.
antibiotic sensitivity testing, polyene antibiotics, growth zones relationship 191.
antibiotic sensitivity testing, use, immunofluorescence, methodology 1605.
antibiotic sensitivity testing, use, lasers nephelometry automated methods 9737.
antibiotics, antifungal activity, *Phytophthora cactorum* 8633.
antibiotics inhibition zones, measuring techniques 9719.
antibiotics production, role, genetic engineering 1601.
antigen expression, immunoassays detection 9874.
antimicrobial activity, *Basidiomycetes*, antibiotics 2496.
antimicrobial activity, biquaternary ammonium compounds 703.
antimicrobial activity, interferon 7952.
antimicrobial activity, preservatives, acetic acid, sodium chloride, essential oils 705.
antimicrobial activity, 2H-1,3,5-thiadiazine-2,4(3H)-dione derivatives 1585.
antimicrobial agents biological properties, synthesis 8773.
aquatic environment, most probable number detection, use, calculator 8139.
aromatic compounds mineralization, lakes, sewage 2008.
aromatic compounds transformation 2019.
assays, laminar air flow safety equipment 5332.
autometry hydrolysis, 1-acetoxy-2,3-dichloropropane 158.
bacteremia diagnosis, blood culture methodology, man 860.
bacteriuria, man, detection, urine microscopy 2695.
beer fermentation, dimethyl sulfide role 8405.
bioassays, hydrogenase, activity 6336.
biodegradation, cellulose acetate reverse osmosis, membranes 2883.
biodegradation, conferences 2729.
biodegradation, hydroquinone 8427.
biodegradation, oxalic acid, aquatic environment, sediments 7543.
biodegradation, PCB 2895.
biodegradation, phenol, sewage sludge 8941.
biodegradation, phenylalanine, catechol-2,3-dioxygenase 157.
biodegradation, sulfur compounds, petroleum 5597.
biodegradation, wheat gluten 2915.
biodegradation, wood cell walls, aquatic environment 8426.
biodegradation, 6-aminoheptanoic acid 3783.
biodegradation, fouling organisms, control, oil, forestry products, effluents, books, conferences 10004.
biodegradation, industries, conferences 4753.
biodegradation, industries, history, conferences 4754.
biodegradation, industries, preservatives, bactericides use, conferences 4755.
biodegradation, oil pipelines, Canada, hydrogen sulfide production association 7018.
biodegradation, water supplies, industries, conferences 4756.
biofilms, wastewater treatment, population studies 5300.
biological control, insecta 4722.
biological control, insecta 7471.
biological control, insecta, commercial species, marketing 1021.
biological control, interference, sap, host plants 2831.
biological control, pathogenicity, animals 4711.
biomass, activity, bioreactors, factor affecting 9104.
biomass determination, dry matter water uptake analysis 8129.
biomass measuring techniques, muramic acid, high-performance liquid chromatography, sediments, marine environment 7252.
biomass, muramic acid indicators, gas chromatography, sediments, estuaries 9027.
biomass, rhizosphere, litter, soil, agricultural practices, meadows 9534.
blight, *Manihot* essentialia, symptoms, etiology 4022.
blight, *Phaseolus vulgaris*, disease control 9462.
blight, Pierce's disease, *Oncometopia nigrans*, disease transmission, Citrus 1204.
blood culture, centrifugation, isolation methodology 9947.
bulgein, interaction, β -lactam antibiotics, effects on, morphology 2461.
butyric acid, fermentation, mathematical models 9065.
cadmium bioaccumulation, pollution effects 794.
cadmium uptake 1489.
calcification, calcium carbonate, caves 8711.
carbohydrates metabolism pathways, tricarboxylic acid cycle, enzymes 123.
carbon dioxide, formation, 2,4-D, degradation, mineralization, soil 5909.
carbon monoxide oxidation, air pollution 9795.
carbonate dehydratase, sulfonamides, inhibition, reviews 8756.
carrots washing effects on 5613.
cell adhesion, polystyrene substrates, measuring techniques, use, bioluminescence 4489.
cell culture, dilution, automated methods 3600.
cell culture, sampling, statistical analysis, species diversity measurements methodology 870.
cell cycle analysis methodology, relationship, growth rate 3559.
cell disruption, methodology glass beads 6337.
cell injury, association, novobiocin, cormycin 5280.
cell size measuring techniques, Coulter nano-sizer 2646.
cell walls, amino sugars, sugars, gas chromatography 9877.

Bacteria, (continued)

cell walls, lipopolysaccharides, reaction, polymyxin B, identification, methodology 1790.
cell walls peptidoglycans, conformational analysis 3714.
cellulolytic microorganisms, wood, fungi effects on cellulose biodegradation 2005.
centrifugation, milk, ultrahigh temperature pasteurization, organoleptic properties 2333.
cephalosporins antibacterial activity 8837.
cheese ripening, amino acids levels 5603.
chlorobenzoates dehalogenation 4749.
5,6-cis-carbapenem- β -lactam antibiotics, antibacterial synergism, inhibition, β -lactamase 1683.
citrate (pro-3S)-lyase, 2-fluorocitric acid, 2-hydroxycitric acid enantiomers inactivation 7708.
clinical isolates, antibacterial activity, cefotaxim, tobramycin, comparison N-formimideyl thenamycin 7076.
clinical isolates, antibacterial activity, gentamicin, tobramycin, netilmicin, media analysis 7074.
clinical isolates, antibacterial activity, moxalactam 2505.
clinical isolates, antibiotic resistance 7024.
clinical isolates, antibiotic sensitivity testing 2522.
clinical isolates, antibiotic sensitivity testing 7131.
clinical isolates, antibiotic sensitivity testing 7132.
clinical isolates, antibiotic sensitivity testing, cefotetan 737.
clinical isolates, BAY 09867, quinolones derivatives, antibacterial activity 511.
clinical isolates, blood culture, sucrose effects on detection 9955.
clinical isolates, cancer patients, antitumor agents, antimicrobial activity 9675.
clinical isolates, cefoperazone antibacterial activity 7146.
clinical isolates, cerebrospinal fluid, media (culture) 852.
clinical isolates, identification, counter immunoelectrophoresis, fluorescent antibody test, clinical microbiology 834.
clinical isolates, trimethoprim drug resistance mechanisms 5999.
clinical microbiology, computer applications 3593.
clinical microbiology, laboratories, quality control 710.
clony formation, counting methods, statistical analysis 6342.
cold-forming cells, growth, multiplication, mathematical models, soil 2345.
community structure, mines, drainage, effects on, lakes 8068.
contamination, anesthesia medical personnel, man, medical equipment 7205.
contamination, animals feeds, conferences 5455.
contamination, antibiotics fermentation, Penicillium, Streptomyces, detection, Bacillus test 8824.
contamination, aquifers, methanogenesis, phenol 4450.
contamination, bedding, hospitals 1731.
contamination, beef, hot-boning, cold storage, abattoirs 244.
contamination, breast milk, man 4770.
contamination, breast milk, pasteurization, cold storage 214.
contamination, cattle carcasses, swabs enumeration methodology 5404.
contamination, control, preservatives, antibacterial activity 4320.
contamination, enterovirus immobilization bentonite, ethanol bactericidal activity 3523.
contamination, fishery products, Kenya 3837.
contamination, food industry, heat exchange cleaning systems 4784.
contamination, food industry, sugars 184.
contamination, food, water, sewage, public health, man 5285.
contamination, injectable vials, medical equipment, cost-benefit analysis 9822.
contamination, lettuce (juices, public health, man 4792.
contamination, meat 5622.
contamination, meat, surveys 223.
contamination, medicine 4464.
contamination, milk, food quality, storage 4837.
contamination, milk, milking machines 4823.
contamination, milk, organoleptic evaluation, standards 4839.
contamination, milk, packaging, pasteurization 8500.
contamination, milk, quality control 4834.
contamination, milk, sanitation, milking machines 5341.
contamination, poultry, counting methods, factors affecting 190.
contamination, respiratory, medical equipment, nosocomial environments 9823.
contamination, sampling methodology, carcasses 2028.
contamination, semen cryopreservation media, antimicrobial activity, nipagin 1591.
contamination, serological tests reagents, quality control 5229.
contamination, standards, milk 4824.
contamination, teeth, man, dentistry instruments 2643.
contamination, tissues damage, organoleptic evaluation, beef, mutton 181.
contamination, vaccinia virus samples, phenols elimination 2657.
contamination, water disinfection, cleaning systems, milking machines 5342.
contamination, water quality, association otitis externa, epidemiology, man 2630.
conversion, abietal, sclareol 6616.
cooling water systems surfaces contamination, bactericides, nutrient availability effects on 4451.
corn fermentation, ethanol biosynthesis, batch culture 134.
cotrimoxazole, antibacterial activity, folic acid pathway 6033.
cortimoxazole, antibacterial activity, reviews 6032.
counting methods, automated methods, milk 215.
counting methods, fluorescence- α -membrane filtration 1798.
counting methods, separation films, activated sludge, ultrasound 8933.
counting methods, statistical analysis 1793.
crop residues fermentation, single-cell protein production 9110.
crown gall induction, plants 4928.
cryogenics, effects on, food processing 3862.
culture, freeze-drying, association, contamination analysis methodology 2684.
culture tanks, aerobic conditions, comparison, antibiotic conditions 9883.
cytology, bactericidal activity, mezlocillin, azlocillin 8850.
cytology, bactericidal activity, mezlocillin, azlocillin 9753.
dairy products, fermentation effects on, ethanol, volatiles acids 4853.
dalapon utilization, association dehalogenase biosynthesis 6560.
dating methods, Shroud of Turin 2645.
Daucus carota roots phytoalexins antimicrobial activity 5057.
dehalogenation, haloaromatic organic compounds, methanogenesis 5290.
dehalogenation, halogenated aromatic compounds, lakes, sediments 6648.
dental caries, gingivitis, children, prevention 6282.
dental caries, man, antibacterial activity, fluoride dentrifices 3504.

Bacteria. (continued)

- dental caries, man, prevention, calcium fluoride transformation 814.
dental disorders, prophylaxis, children 811.
dental disorders prophylaxis, fluoride dentifrices 812.
dental disorders, prophylaxis, man 809.
dental disorders, treatment, children 810.
dental plaque, dental caries, hygiene, children 2642.
dental plaque isolates, growth, nutrient requirements, chemostats, methodology 4497.
dental plaque, man, control programs 3507.
deposition, glass capillary, mathematical models 984.
detection, limulus lysate test, milk, ultrahigh temperature, pasteurization 201.
detection, methodology, bioluminescence, chemiluminescence, use, clinical microbiology 4478.
diagnosis, counter immunoelectrophoresis, man 6316.
digestion (anaerobic), methane reactors, mathematical models 5308.
disease control, canned food, meat 3807.
disease resistance, phytoalexins biosynthesis, energetics, plant breeding 4059.
disease resistance, phytoalexins biosynthesis, energetics, plant breeding 4059.
diseases, Gossypium seedlings, disease control 2225.
disinfectants, optimum concentrations, antimicrobial activity 2498.
disinfection, antiseptics, hospitals 5347.
disinfection, antiseptics, hospitals, man 5348.
disinfection, bottles, bottle feeding, infants, man 800.
disinfection, dentistry equipment, use, water sprays 5335.
disinfection, environmental hygiene 5349.
disinfection, food processing 4842.
disinfection standardization 6085.
disinfection, wastewater treatment, ozonation 5324.
distribution, lakes, Italy, seasonal variations 7203.
DNA base composition, electrophoresis 7254.
drinking water, contamination, Egypt, rivers 2618.
drinking water isolates, chlorine resistance 633.
drug resistance, cotrimoxazole, trimethoprim, reviews 3293.
drug resistance mechanisms, trimethoprim, sulfonamides, cotrimoxazole 6000.
dust, page housing 7638.
effects on chemical speciation, mercury, aquatic environment 1516.
effects on corn meals, nutritive value 251.
effects on roots, growth, *Lupinus albus* 582.
electrophoretic mobility assays, video cassette recorder use 2692.
endotoxins, association prostaglandins, characterization 8515.
endotoxins, detection, Limulus lysate test, milk 8478.
endotoxins levels, seafood, Limulus lysate test 2956.
endotoxins, Limulus lysate test, reaction, immunoelectrophoresis detection 9308.
endotoxins, lipopolysaccharides, assays, cerebrospinal fluid 8525.
enumeration analysis methodology 2677.
enumeration, automated methods, mathematical models 9058.
enumeration, beef carcasses, chilling effects on 8476.
enumeration, food contamination, centrifugation 3581.
enumeration, identification, detection, methodology 4479.
enumeration, meat products 1083.
enumeration, membrane filtration 3512.
enumeration, milking machines, hygiene, direct epifluorescent filter technique 6270.
environmental hygiene, laboratory animals 5334.
environmental surveys, marine environment, association, bubbles, methodology 4495.
enzymatic synthesis, FAD 9214.
enzyme-linked immunosorbent assay detection, *Prunus persica* phony disease 7684.
enzymes, conversion, steroids 7433.
enzymes, purification, characterization, books 7275.
enzymes, separation techniques, ultrafiltration 9167.
enzymes, technology, clinical microbiology, use 970.
ethanol production, books 5447.
excretion, surfactants, effects on, agar, surface tension, measuring techniques, mathematical models 5378.
fatty acid composition, antibiotic AL-87 effects on 8895.
fatty acids, inhibition, β -lactamase 6152.
feces, water resources, quantification 5322.
feeds contamination 4861.
feeds contamination, domestic animals 248.
fermentation effects on proteins, milk products production 4805.
fermentation, milk, effects on vitamins 4854.
fermentation, milk products, effects on lactose 4855.
fermentation, *Pentaclethra macrophylla* seeds 6675.
fermentation, wine production 2053.
fermentation, 2,3-butanediol isomers production 7505.
filamentous microorganisms incidence, activated sludge 8974.
filamentous, water treatment 9800.
food contamination, beef, electrical stimulation 185.
food contamination, beef, pork, temperature effects on 241.
food contamination, beef vacuum packaging, oxygen barriers, films 261.
food contamination, carbon dioxide detection, I.R. radiation use 4851.
food contamination, carcasses, meat industry, Norway 5618.
food contamination, chickens, abattoirs 2034.
food contamination, conferences 5453.
food contamination, cooking, kitchens 235.
food contamination, cooking, sanitation, kitchens 213.
food contamination, counting methods, membrane filtration, fluorescence 176.
food contamination, effects on rice composition 7588.
food contamination, eggs, temperature effects on 4844.
food contamination, enumeration equipment 3575.
food contamination, fishery products, U.V. radiation treatment 4849.
food contamination, food poisoning, man, disease control 3496.
food contamination, ham 3832.
food contamination, hygiene, prevention, intoxication, man 194.
food contamination, ice cream 238.
food contamination, identification, gas chromatography 236.
food contamination, meat 3653.
food contamination, meat, enumeration methodology 3613.
food contamination, meat production 199.
food contamination, meat, sampling methodology 9006.
food contamination, microbial pollution, drinking water, indicator species, conferences 5454.
food contamination, milk, conferences 5458.
food contamination, packaging, beef 224.

Bacteria. (continued)

- food contamination protection, vegetables 2918.
food contamination, ripening, salami 2030.
food contamination, seafood 8466.
food contamination, seafood, quality control, resazurin test 3374.
food contamination, spoilage, poultry, cooking, kitchens 1067.
food processing, *Alium cepa*, microbiology 3843.
food spoilage, luncheon meat, food processing, heat treatments, effects on 6678.
formate dehydrogenase, active sites lysine residues chemical modification 7380.
formate dehydrogenase use, NAD regeneration systems 4686.
fouling assays methodology 8128.
fouling organisms, films, cooling water, industrial water systems 6257.
fouling organisms, heat transfer equipment, books 5444.
freeze-drying, agar, media (culture) 5386.
 β -D-galactosidase activity, measuring techniques, *Saccharomyces cerevisiae* 3622.
gas production, association, growth, kinetics, mathematical models 9873.
gastroenteritis, isolates, antibiotic sensitivity testing, drug sensitivity testing 2521.
gene amplification, temperature jump studies, use, microwave oven 9892.
genetic engineering, plasmids, methodology 5364.
gentamicin biosynthesis, fermentation, aeration, agitation 7153.
germicides, drug sensitivity testing, methodology 5192.
glucose stimulation 2,4-D biodegradation, soil 7809.
glucose transport, role phosphoenolpyruvate-glucose phosphotransferase 6411.
 α -D-glucosidase hydrolysis, carbohydrates 7431.
gold, biogeochemistry 7013.
greening disease transmission, *Cuscuta* role, *Citrus sinensis*, *Vinca rosea* 9448.
ground water, counting methods 3485.
growth, β -amylase biosynthesis, fractionation, media methodology 5428.
growth, association carbon, water treatment 2618.
growth, association, wood extracts nutrient sources 3.
growth, batch culture, mathematical models 8132.
growth, cold storage, packaging, beef, liver, tongue 267.
growth, contamination, ham, smoking, curing 180.
growth, contamination, milk, cold storage 4827.
growth, contamination, milk, storage, dairies 4832.
growth, contamination, tobacco 438.
growth, copper pipelines, disinfection apparatus 5344.
growth, crop residues digestion, factors affecting, forage quality 4860.
growth, milk, refrigeration, storage 4826.
growth, sugar inhibition, association, wound infection treatment, man, in vitro 7056.
growth, 2-hexadecynoic acid effects on 683.
heat treatments, effects on, beef, food quality, reviews 8488.
heavy metals leaching, screening methodology 3256.
Helianthus annuus sesquiterpene lactones antimicrobial activity 7953.
histamine biosynthesis, food poisoning 121.
histology stains, scanning electron microscopy 866.
Holothuride triepene glycosides antimicrobial activity 2494.
hospitals, disinfectants antibacterial activity 4459.
hospitals laundry, washing, water temperature effects on 3498.
host-pathogen interactions, disease resistance, genetic factors, plants 468.
hydrocarbons, aromatic compounds, biodegradation 3263.
hydrogen cyanide productions, detection methodology 3567.
hydrogenase, activity, immobilization, applications, reviews 9169.
 α -hydroxy acid production 2743.
ice nucleation, frost damage, plants 4130.
ice, nucleol, acetation, cryoinjury, *Zea mays*, *Erwinia herbicola*, biological control 8643.
identification, diagnosis, methodology, automated methods, books 5449.
identification, fluorometry methodology 9044.
identification, gas-liquid chromatography, clinical isolates, meningitis 853.
identification, isolation, *Eichhornia crassipes* 3056.
immobilization methodology 8127.
immobilized cells, transformation, steroids, reviews 3706.
inactivation, viruses, activated sludge 79.
In plasmids, classification methodology 6335.
indicator species, association, drinking water, waste water, water sources 797.
indicator species, composts, factors affecting survival 6252.
indicator species, enumeration, water sampling, light effects on 2625.
indicator species, marine pollution, microbial pollution, measuring techniques, *Pelecyoda* 9376.
infection, animal models, cefotaxime treatment, antibacterial activity 6129.
infection, catheter, scanning electron microscopy 802.
infection, cotrimoxazole intravenous administration, in vitro antibacterial activity, man 6037.
infection, intestine, man, carriers, hygiene, sanitation 7208.
infection, mammary gland, cattle, penicillin G-streptomycin treatment, isolates susceptibility 8851.
infection, man, cefotaxime treatment, antibacterial activity 6124.
infection, Medicago sativa, disease resistance 7750.
infection, plants, 2-chloroethylphosphonic acid effects on pathogenicity 319.
infection, stimulation, disease resistance, plants 3120.
infection, treatment, antibacterial agents, association, drug resistance induction, cattle 3284.
infection treatment, man, cephalixin+flucloxacillin, antibacterial activity 6132.
infection, Trifolium repens, Medicago sativa, *Cicer arietinum*, effects on, nodulation, yield 2226.
infection, vegetables, plants, disease control 2267.
infection, *Vigna unguiculata*, disease resistance breeding 3138.
infection, *Zea mays*, effects on minerals uptake 4190.
inorganic pyrophosphatase, kinetics, reviews 6465.
interaction, Protozoa, soil 552.
isolates, hospitals, antibiotic resistance 8732.
isolation, blood culture, Bactec test 9950.
isolation, blood culture, media (culture), sucrose effects on 9930.
isolation, blood culture, subculture, aerobic conditions 9924.
isolation, characterization, abscesses, pigs carcasses 5619.
isolation, media (selective), contagious equine metritis, horses 862.
isolation, soil, saline environments 3196.
labelling, use, palmitic acid, association, cell aggregation assays 7245.
 β -lactam antibiotics, β -lactamase identification, substrate specificity 3728.
 β -lactam antibiotics, aminoglycoside antibiotics, synergism, therapeutic

Subject Index

Bacteria, (continued)

applications, antibacterial activity, reviews 6091.
 β -lactam antibiotics production, screening 4337.
 β -lactam antibiotics resistance, genetic analysis, characterization 7883.
 β -lactam antibiotics resistance, role, penicillin-binding protein, function, culture, reviews 6397.
 β -lactamase activity, amoxycillin + clavulanic acid 3411.
 β -lactamase inhibition analysis methodology, role, inhibitors, β -lactam antibiotics 6101.
 β -lactamase inhibition, isodopencillanate, bromopencillanate 3404.
 β -lactamase, isoelectric focusing methodology, cellulose acetate membranes 9038.
 β -lactamase isolation, purification 4665.
lakes sediments, factors affecting methanogenesis 624.
leaching, ores, mining 5135.
leaf blight, etiology, *Zizania aquatica* 5702.
leaf litter decomposition, carbon, nitrogen production, *Fagus sylvatica*, conifer, association, climate 2021.
leaf litter, Pinus, methyl bromide, dazomet, effects on 3250.
levels, drinking water, environmental monitoring 1717.
levels, food contamination, freeze-thawing effects on, curing, ham 182.
levels, meat, shelf life, storage conditions 7598.
levels, relationship, substrates retention, pigs animal wastes digestion (anaerobic) 9808.
levels, water supplies, Germany, Fed. Rep. 1716.
lipid metabolism, enzymes, books 9090.
lipopolysaccharides, radiation detoxification 6728.
lysis, isolation, activated sludge, role, decontamination, USSR 8062.
marine environment, oil biodegradation 8719.
marine microorganisms, biodegradation, marine pollution, nitrilotriacetic acid, sewage effluents 5323.
measuring techniques, milk, fluorescence, filters 6673.
meccilamin- β -lactam antibiotics antibacterial activity 3314.
media (culture) preparation, comparison 6323.
media (selective), quality control 7212.
media (transport), survival 3614.
medical instruments sterilization, paraformaldehyde tablets use 5228.
membranes lipids, relationship soil sediments 5104.
membranes ultrafiltration, milk products, hygiene 4791.
methanogenesis, biosynthesis, precursors, enzymes, genetic control, reviews 6628.
metabolism, iron reduction, flooding, soil 6959.
metals tolerance, association, soil pollution 6980.
metals uptake, wastewater treatment 5313.
methane biosynthesis, sewage treatment reactors 4435.
methane oxidation, coal mine 4285.
methodology, assays, poly- β -hydroxybutyric acid, inorganic compounds, phosphates 4496.
microbial pollution, mathematical models, coastal waters, estuaries 9813.
microbial pollution, sewage, temperature, effects on, rivers 6264.
microbial pollution, wells, ground water 2623.
microflora, vegetables sprouts 8473.
microorganisms, microbiology, books 8184.
microwave radiation sterilization, culture systems plastics 708.
milk biodegradation, soil 163.
milk contamination, hygiene, man 5351.
milk contamination, relationship, udder preparation, cattle 4798.
milk contamination, teats washing effects on, cattle 5350.
milk pasteurization, chemical analysis 191.
mixed culture, biodegradation, *Acinetobacter calcoaceticus* emulsan 8424.
morphology, kefir 5609.
multiplication, water isolates, drinking water 2631.
mutagenicity testing, chemical pollution 1784.
mutants, isolation, methods 9040.
nitrification inhibitors, bacteriostasis 2405.
nitrogen cycle, lakes, USA, Washington, environmental impact, volcanoes 5122.
nitrogen fixation inhibition, association nitrite 5124.
nitrogen fixation, plasmids transfer, conferences 5452.
nitrogenase, immunofluorescence, assays 930.
nitrous oxide biosynthesis 1968.
nosocomial infection, antibiotics use, environmental hygiene, man 8981.
nosocomial infection, man, disease control, environmental hygiene 3495.
nucleotides, filtration, high-pressure liquid chromatography 876.
oil deposits microflora, flooding effects on activity 627.
olives fermentation, food spoilage prevention 204.
oral cavity isolates, xylitol bacteriostasis 8782.
organic compounds biodegradation, lakes sediments fatty acid composition 7553.
organic compounds decomposition, wastewater treatment, activated carbon filters 8956.
organic compounds mineralization, freshwater environments, sewage 2012.
organic matter biodegradation, hydrogen intermediates 2011.
organic matter turnover, soil 5096.
outer membranes phospholipase role, drugs antibacterial activity 8783.
oxidase-positive, clinical isolates, identification, API test, Oxi-Ferm tube test, Minitek test 9019.
parathion biodegradation, rhizosphere microorganisms, *Oryza sativa* 2897.
parathion hydrolysis, soil 155.
pathogenicity effects on, Beta vulgaris crop production 403.
pathogens, antibacterial activity, EDTA + Tris + antibiotics 7080.
pathogens contamination, houses 4505.
pathogens, contamination, milk 4818.
pathogens, isolation, sewage sludge 6248.
pathogens, man, incidence, detection 2640.
PCE biodegradation, rivers sediments isolates 8421.
penicillin-binding protein, affinity ceftazidime, antibacterial activity 8835.
peridontal diseases, roots surfaces, citric acid, antibacterial activity 2457.
peridontal diseases isolates, antibiotic sensitivity testing 3376.
peridontal diseases, prophylaxis, oral hygiene, man 1733.
phages lyse, use, Inc plasmids classification 9879.
Pierce's disease, incidence, plants, vectors, USA, California 8531.
Pierce's disease, raton sturt, immunofluorescence, detection plant diseases 320.
Pierce's disease, *Vitis vinifera*, pathogenesis 5027.
Pierce's disease, wilt, seedlings, Citrus jambihi 392.
Pisces intestinal microflora, pollution indicators, water pollution, Iran 1725.
plant diseases, conferences 7280.
plant diseases, plants extracts, antibacterial activity 9686.
plant diseases, vectors, insects, reviews 2369.

Bacteria, (continued)

pollution indicators, removal, waste treatment methodology 2610.
polysaccharides, applications, industries, reviews 9200.
polysaccharides characterization, intertidal environment 7443.
population density, *Fagus sylvatica* forests soil 4142.
population levels, cell numbers, viability, population ecology, activated sludge 4440.
population levels, population ecology, activated sludge 4439.
populations, South Africa Rep. plains 4217.
post-harvest decay, corn, sulfur dioxide effects on 6836.
post-harvest decay, etiology, *Manihot esculenta* 3102.
postoperative infection, man, prophylaxis, laminar air flow 3497.
production, fatty acids, use, mandarin orange peel, Japan 4260.
propionic acid metabolism, kinetics, digestion (anaerobic) 8944.
proteins, screening projects, bioassays 3599.
proteases, spoilage, off flavor, milk 4815.
proteins determination methodology, rumen fluids, cattle 5408.
pyrolysis, mass spectrometry, association, identification 3610.
ratoon sturt, Cynodon dactylon, etiology 3009.
ratoon sturt, effects on, *Saccharum officinale*, yield 2139.
ratoon sturt, *Saccharum*, disease control, heat treatments 9468.
recombinants, batch culture, fermentation kinetics 1979.
recovery, animals, pleural fluid, synovial fluid, media methodology 3609.
recovery, media role, mice isolates 3546.
relationship, phosphonates soil, New Zealand 1469.
removal, glass surfaces 4456.
resistance, antimicrobial agents, metals, ions, association, plasmids, reviews 8735.
resistance, antiseptics mechanisms 2408.
respiratory tract infection, bekanamycin treatment, man, antibacterial activity 6186.
Rhizobium japonicum antagonists 576.
rhizoplane microorganisms, incidence, Gramineae mixtures 569.
role, trace elements enrichment, manganese oxidation 9616.
rumen, enumeration, media methodology 9890.
rumen microorganisms, avoparcin effects on growth 8035.
rumen microorganisms, cattle, formaldehyde effects on proteins metabolism 4857.
rumen microorganisms, feeds diaminopimelic acid content effects on, role, markers, production 6680.
Salmonella typhimurium, contamination, growth, beef, packaging 265.
sampling, mathematical models, methodology 7258.
scald, *Prunus salicina*, epidemiology, Brazil 1221.
scanning electron microscopy, books 903.
Scenedesmus, oscillatoria, mixed culture, phosphorus removal, wastewater treatment 2815.
seafloor conversion 3785.
seafloor, *Crassostrea virginica*, *Mercenaria campechiensis*, storage effects on 4765.
seafloor spoilage, detection, ethanol levels 8458.
seed-borne diseases, pathogenesis 2973.
seed-borne diseases, quality control assays 2968.
sewage, N-methyl-2-pyrrolidone biodegradation 2017.
sewage sludge, public health, man 7192.
siderophores detection, electrophoresis methodology 8090.
single-cell protein, nutritive value, production, economics, technology 9107.
single-cell protein production 7602.
soil, Antarctica 1475.
soil, carbon sources, seeds germination exudates 551.
soil fauna association *Zea mays* 6941.
soil isolates, struvite precipitation 8710.
soil microorganisms association Glycine max, propachlor effects on 7862.
soil microorganisms, carap effects on 3248.
soil microorganisms, cold tolerance 9552.
soil microorganisms, gallic acid biodegradation 7563.
soil microorganisms, incidence, distribution, factors affecting 588.
soil microorganisms, low temperature scanning electron microscopy 578.
soil microorganisms, population changes, *Fagus sylvatica* forests, clear cutting, Picea abies replacement 7779.
soil microorganisms, population dynamics, mounds, *Isoptera*, Kenya 8669.
soil microorganisms, population levels, slash and burn 9622.
soil microorganisms, respiration, soils (loam), sterilization, storage, effects on 6977.
soil microorganisms, species diversity, biogeochemistry, USSR 2347.
soil microorganisms, vertical distribution, soil profiles 2350.
soil, nitrogen fixation, USSR 2361.
soil, population dynamics, soil analysis; methodology 4224.
soil, straw biodegradation, phytotoxicity 8419.
species composition, atmosphere composition effects on, blood culture 9012.
species diversity, soil, *Pahokee* muck, respiration, community structure, enzymatic activity, population density, environmental conditions 5912.
species, wetwood etiology, *Ulmus americana* 8657.
spillage, disinfection, industrial water systems, breweries 5321.
spillage, food contamination, packaging, seafood 2935.
spillage, fruit juices, bitterness, role limonin 7590.
spillage, milk, pasteurization, refrigeration 2913.
spillage, off flavor, milk 183.
spillage, seafood, chlorotetracycline + sodium chloride treatment effects on 2922.
spillage, sprinck, nitrite formation 435.
sterilization, packaging 4321.
streptothricin resistance 9643.
stunt, pathology, *Ambrosia artemisiifolia*, vectors 8576.
styryl cyanine dyes, bactericidal activity 9703.
substrates utilization, reviews 6655.
sulfate reduction, media, enumeration 2689.
sulfide leaching 9627.
supernatants, acetic acid, enzymes assays 7234.
surfaces, Brassica seeds, factors affecting 4793.
survival, association, temperature, digestion (anaerobic), digestion (aerobic), wastewater treatment 2613.
survival, beef, cooling 210.
survival, spraying, drying, milk 4876.
suspension culture density, solid phase methods 4501.
Susser's semen, antibacterial activity, antibiotics 751.
swabs transport methodology 2685.
symbiosis, algae, photosynthesis, starch biosynthesis 3708.
synthetic detergents antimicrobial activity 7958.

Bacteria, (continued)

- onomy (numerical), computer applications 9887.
 nitrification effects on iron oxidation, rivers contamination, mines waste water 5134.
 thermophilic microorganisms, α -amylase biosynthesis 1913.
 tetracycline antibacterial activity, comparison, tetracycline, doxycycline, minocycline 1637.
 tetracycline sulfuryltransferase, chloridazon biodegradation 156.
 toxicity testing, water pollution 6241.
 transformation, haloaromatic organic compounds, denitrification, growth conditions 5291.
 trapping, fibrin polymerization 2698.
 trimethoprim, rifampicin, synergism, in vitro, antibacterial activity, drug resistance 6163.
 tritration, milk, inorganic compounds membranes 4782.
 urease positive, antibiotic sensitivity testing, neomycin, ampicillin 751.
 urinary tract clinical isolates, nalidixic acid resistance, rosoxacin antibacterial activity 5195.
 urinary tract infection, dibekacin treatment, man, antibacterial activity 6187.
 urinary tract isolates, antibiotic sensitivity testing, antibiotic resistance 4287.
 urinary tract isolates, antibiotics sensitivity 8813.
 urinary tract isolates, antimicrobial agents activity 8767.
 urinary tract nosocomial infection, incidence, man, environmental hygiene 8074.
 urine, culture methodology 5387.
 urine, media (transport) effects on 9909.
 urine, preservation methodology 3618.
 urine, carcinogenicity testing, methodology 4465.
 urine, drug sensitivity testing, antimicrobial agents efficacy 9702.
 vaccines, production 5283.
 vaccines contamination, association, soil disinfection 3253.
 vertical distribution, ground water 8670.
 viability, counting methods, most probable number 5431.
 viability, slide culture, freshwater environments 3562.
 viabilities, urine, gas chromatography, diagnosis, urine, man 6315.
 waste water, coal, drainage systems, sodium lauryl sulfate, sodium benzoate, inhibition 8713.
 wastewater treatment, denitrification 5328.
 wastewater treatment membrane filtration fouling organisms, films characterization 3465.
 wastewater treatment ponds, population growth, symbiosis, algae 2605.
 water activity, spoilage, frankfurters 6667.
 water sterilization, U.V. radiation effects on 4325.
 water-borne diseases, man, drinking water 2633.
 wetwood, Abies 6923.
 wetwood, Abies concolor, characterization 547.
 wetwood, gas production, Ulmus americana 2323.
 white, Gramineae, pathogenicity, host specificity 359.
 wood decay, nutrient requirements 3782.
 wood decomposition, spatial distribution, population levels, stands, Fagus grandifolia, Acer saccharum 6891.
 wood decomposition, streams sediments 2885.
 wood infection, velvet sampling, man 5406.
 xenobiotics biodegradation, factors affecting 3788.
 Yersinia enterocolitica activity 3372.
Bacteroides
 control Pedococcus contamination 8966.
 disease control, Erwinia amylovora, fireblight, Pyrus 1207.
 effects on bacteria, cooling water systems surfaces contamination 4451.
 use, bacteria biodegradation, industries, conferences 4755.
Bacteriophage
 aptosira, canine distemper virus, adenovirus (canine), parvovirus (canine), parainfluenza virus, vaccines, immunogenicity, dogs 8924.
Bacteriophage typing
 ebisella 8137.
 reus mirabilis 1777.
 errata marcescens, methodology 9895.
Bacteriophage
 actinocytus, plant diseases, disease control 5843.
Bacteriophage
 activity expression, Neisseria meningitidis batch culture, recombination 7173.
 analysis, Clostridium perfringens, growth methodology 2705.
 antibacterial activity, Clostridium perfringens, L form 759.
 antibiotic sensitivity testing, relationship, taxonomy, Lactobacillus 1659.
 acillus megaterium, comparison, megacin A 8044.
 actinocytus, plant diseases, disease control 5843.
 actinocytus fragilis, purification, characterization 8894.
 osynthesis induction, U.V. radiation, mytomycin C, Erwinia 760.
 osynthesis, Pseudomonas syringae infection, activity, Phaeoelus vulgaris tissues 2114.
 ostridium bifurmentans, activity 4410.
 ffects on, macromolecules, biosynthesis, nutrient transport, ATP, Erwinia carotovora 2589.
 ebisella pneumonolae, activity, characterization 3421.
 isseria meningitidis, growth, inhibition 3321.
 uction, Brucella isolates, USSR 2593.
 uction, Streptococcus salivarius, antibacterial activity 4427.
 nification, characterization, Streptococcus mutans 6223.
 aphycoccus aureus oral isolates, purification, characterization, antibacterial activity 3423.
 reptococcus mutans, purification, characterization, antibacterial activity 8025.
 reptococcus, production 2583.
 eracin, Corynebacterium ulcerans, purification, characterization, antibacterial activity 8026.
Bacteriophage
 iology.
 iotics use immunoassays reviews 1604.
Bacteriophage
 cherichia coli, biosynthesis 8384.
Bacteriophage
 ficient mutant, retinal-binding protein purification, characterization, purple membranes, Halobacterium halobium 4561.
 ding, subunit assembly, structure-activity relationships, Halobacterium halobium 5464.
 otochemistry, I.R. spectroscopy, purple membranes, Halobacterium halobium 4554.
 onary structure, C.D. purple membranes, Halobacterium halobium 6393.
- Bacteriostasis**
 Mycobacterium avium-intracellular, sulfadimethoxine, kansasmycin 7912.
 nitrification inhibitors 2405
 soil 3179.
Bacteriostasis
 Pseudomonas aeruginosa exotoxins, effects on HeLa cells 1108.
Bacteriostasis
 ATP levels, bioassays, luciferin 4-monooxygenase (ATP-hydrolysing) 9928.
 detection, dipstick test, urine bacteria 9965.
 gram-negative bacilli, isolates, man, norfloxacin antibacterial activity 7073.
 man, detection, urine microscopy 2695
 urine screening, counting methods, man 9945.
Bacteriostasis
 cellulose hydrolysis 7545.
Bacteriostasis
 antibacterial activity, cefotetan 4345.
 antibacterial activity, cefotetan 4356.
 antibacterial activity, rifamycin derivatives 8858.
 antibiotic sensitivity testing, cefotetan 4346.
 antibiotics, effects on, growth 6100.
 azlocillin, mezlocillin, antibacterial activity 748.
 clindamycin resistance, nucleotide sequence homology 6013.
 clinical isolates, antibacterial activity, ceftazidime, cefotaxime, moxalactam 4365.
 clinical isolates, antibiotic sensitivity testing 7132.
 clinical isolates, incubation, anaerobic environments 2680.
 compound U-57930E antibacterial activity 4379.
 drug sensitivity testing, metronidazole 6043.
 endo-1,3- β -D-xylanase, xylan biodegradation, intestinal microflora, man 2022.
 Escherichia coli, mixed culture, antibacterial activity, cefotaxime, metronidazole 7999.
 heavy metals susceptibility 681.
 identification, immunofluorescence 865.
 infection, cephradine, treatment, in vitro antibacterial activity 676.
 β -lactamase biosynthesis, characterization 5518.
 β -lactamase detection methodology 9037.
 β -lactamase inhibitors, cephalosporins synergism 6133.
 β -lactamase production, association β -lactam antibiotics susceptibility 5199.
 media (culture), nutrient requirements 5415.
 nridazole antibacterial activity 3328.
 oral cavity isolates, antibacterial activity, metronidazole + spiramycin tablets 8864.
 periodontal diseases isolates, antibiotic sensitivity testing 3376.
 recovery, animals, pleural fluid, synovial fluid, media methodology 3609.
 role, infection, antibiotic sensitivity testing, drug sensitivity testing, man 725.
Bacteroides
 antibacterial sensitivity testing, carbon dioxide levels effects on 2507.
 Streptococcus pneumoniae, antibiotic sensitivity testing, aminoglycoside antibiotics, β -lactam antibiotics 6089.
Bacteroides
 antibacterial activity, β -lactam antibiotics 7129.
 antibacterial activity, Actinoplanes philippinensis isohematinic acid 8903.
 antibacterial activity, cefotetan, cefotaxime comparison 4348.
 antibacterial activity, cefotaxime 4367.
 antibacterial activity, cephalosporins, ceftiozime 2535.
 antibacterial activity, mezlocillin, comparison, penicillins 6141.
 antibacterial activity, moxalactam 5269.
 antibacterial activity, moxalactam 5270.
 antibacterial activity, moxalactam 5276.
 antibiotic resistance, clindamycin, detection 9655.
 antibiotic resistance, clindamycin, in vitro 685.
 antibiotic sensitivity testing 7130.
 antibiotic sensitivity testing 8811.
 antibiotic sensitivity testing, cefoperazone 9743.
 antibiotic synergism, antibiotic antagonism, ceftiozime, 3-desacetylcefotaxime 6118.
 antibiotic T-1982 antibacterial activity 735.
 antibiotic U-63196E antibacterial activity, β -lactamase stability, new records 8832.
 aztreonam antibacterial activity 777.
 bacteriocins, purification, characterization 8894.
 cefotetan antibacterial activity comparison 6134.
 clindamycin, β -lactam antibiotics, antibiotic sensitivity testing 5262.
 clindamycin antibiotic resistance, antibiotic sensitivity testing 9735.
 clindamycin antibiotic resistance, disc-diffusion test 7031.
 clindamycin antibiotic resistance, plasmid pB4 transfer 5149.
 clinical isolates, antibacterial activity, cefotixin, tetracycline, comparison N-formimidoyl thienamycin 7076.
 clinical isolates, incubation, anaerobic environments 2680.
 compound U-57930E antibacterial activity 4379.
 Escherichia coli, metronidazole antibacterial activity, pure culture, mixed culture 2447.
 forms, separation techniques, use, density gradients 6332.
 indirect fluorescent antibody test, antisera comparison 1803.
 isolation, children, blood culture methodology 2683.
 β -lactam antibiotics, antibacterial activity 2516.
 β -lactamase, role, antibiotic resistance, purification, characterization 4594.
 metronidazole susceptibility, relationship, pyruvate dehydrogenase activity 7089.
 neuraminidase, isoelectric focusing, electrophoresis, activity 7377.
 neuraminidase, isolation, characterization 4682.
 nitrogen reductase purification, characterization 8267.
 penicillin-binding protein, affinity cephalosporins antibacterial activity 7053.
 primum bacterial activity 757.
 survival, swabs transport system, temperature association 6334.
 temocillin antibacterial activity 6155.
Bacteroides
 Bacteroides fragilis subsp. distasonis, antibiotic L-640 876 antibacterial activity 4426.
Bacteroides
 Bacteroides fragilis subsp. thetaiotaomicron, antibiotic sensitivity testing, cefoperazone 9743.
 clinical isolates, incubation, anaerobic environments 2680.
 identification, association, DNA fragments cloning plasmids 4487.
Bacteroides
 Bacteroides fragilis subsp. vulgatus, propachlor metabolism, 2-mercapto-N-isopropylacetanilide production 8385.

Subject Index

- Bacteroides melaninogenicus**, antibacterial activity, moxalactam 5270. penicillin resistance 4272. subsp. *intermedius*, survival, swabs transport system, temperature association 5334.
- Bacteroides melaninogenicus subsp. asaccharolyticus**, antibiotic L-640,876 antibacterial activity 4426.
- Bacteroides melaninogenicus subsp. intermedius**, phenylacetic acid, production, gas chromatography 5482.
- Bacteroides mycoides**, antibacterial activity, derivatives, carminomycin, rubomycin 2592.
- Bacteroides nodosus**, extracellular proteolytic enzymes, purification, characterization 6466.
- Bacteroides ovatus**, biodegradation, 172.
- Bacteroides polypragmatus**, fermentation, lactose 2864.
- Bacteroides succinogenes**, carbohydrates effects on cellulose digestion 8425. cellulase activity, purification, characterization 8244. rumen microorganisms, avoparcin effects on growth 8035.
- Bacteroides thetaiotaomicron**, antibiotic sensitivity testing, cephalosporins 7136. β -lactamase, role, antibiotic resistance, purification, characterization 4594. proteoglycan digestion 3792.
- Bacteroides uniformis**, clinical isolates, incubation, anaerobic environments 2680.
- Bacteroides vulgatus**, β -lactamase, role, antibiotic resistance, purification, characterization 4594.
- Bacteroides**, nitrogen fixation, ammonia assimilation, nodules, *Trigonella foenum-graecum* 3242. nitrogen-15 distribution, *Rhizobium* nitrogen fixation, *Laguminosae* 9615. *Rhizobium lupini*, lipopolysaccharides, lipid composition, carbohydrate composition 9188. *Rhizobium trifolii*, scanning electron microscopy, nodules, *Trifolium repens* 8676. structure, *Rhizobium*, nodules, nitrogen fixation, *Medicago sativa* 9613. viability, *Rhizobium*, *Pisum sativum*, *Lupinus*, *Trifolium*, *Cilanthus purpureus* 7860.
- Bacteraemia**, production, *Pseudomonas yoshimotoensis*, antitumor antibiotics, culture conditions 8347.
- Bacteriophage**, drug sensitivity testing, urinary tract clinical isolates 6114.
- Baculovirus**, antiviral activity, effects on infectivity, tobacco mosaic virus 1386.
- Baculovirus**, biological control, *Heliothis virescens*, larvae 4719. pathogenicity, *Bombyx mori*, nontarget organisms, biological control 9207. pest control, biological control, *Lepidoptera* 998. pest control, biological control, persistence, *Insecta* 1005.
- Bacillus**, alkaline, *Trichoderma reesei* cellulase activity association, relationship, crystallinity 8312. bioreactors, *Trichoderma reesei* cellulase, hydrolysis 9152. cellulomerase, biodegradation 3793. fermentation, *Aspergillus terreus*, biosynthesis, cellulase, single-cell protein 1826. hydrolysis, cellulase, *Trichoderma reesei* 7430. metabolism, *Aspergillus terreus*, cellulase, single-cell protein biosynthesis 3662. post-harvest decay, fungi, storage time effects on 5030. pretreatment, γ radiation, sodium hydroxide, cellulase production, *Trichoderma reesei* 8449. Saccharum, composts production, microorganisms decomposition activity 7560. Saccharum officinale, production, ethanol, yeasts 5571. sugarcane, cellulosic bacteria growth, proteins products nutritive value 9287. *Zymomonas mobilis*, isolation methodology 6636.
- Bait**, viruses, pathogens, pest control, biological control, *Insecta* 990.
- Bakery products**, production, enzymes use, USSR 6677. properties, relationship, *Triticum aestivum* Neovossia indica, bunt 5708. yeasts, food contamination, water effects on antimicrobial agents 240.
- Baking**, yeasts processing, storage, physicochemical properties 5621.
- Bamboo**, substrates, *Saccharomyces ethanol* production 9225.
- Bemboosa**, phylosphere, nitrogen-fixing bacteria, nitrogen fixation 9590.
- Bambusa arundinacea**, mosaic disease, potyvirus 5705.
- Banana mosaic virus**, disease transmission, *Aphis gossypii*, *Musa sapientum* 3069.
- Bananas**, *Ectyopodiopoda theobromae* rot, post-harvest decay, fungicides control 5804. post-harvest decay, fungi diseases 1328.
- Bangladesh**, children, diarrhea, disease transmission, role, *Escherichia coli* food contamination 4847. man, shigellosis, disease spread, hand washing effects on 5356.
- Banisia**, susceptibility, *Phytophthora cinnamomi*, infection 8592.
- Banisia grandis**, soils (podzolic), effects on, *Phytophthora cinnamomi*, zoospores, pathogenesis, dieback 5850.
- Banisia integrifolia**, berries oils composition, effects on wine flavor, yeasts alcoholic fermentation 6639.
- Barbarea vulgaris**, plant diseases, *Spiroplasma citri*, disease transmission, *Macrosteles fascifrons* 6803.
- Barberis vulgaris**, eradication, USA, disease control, *Triticum stem rust* pathogens 1389.
- Bark**, *Canarium schweinfurthii*, biodegradation, thermophilic fungi 550.
- Bark (continued)**, composites, inhibition soil-borne diseases, plants 3122. *Fagus grandifolia*, *Deuteromycetes* fungal flora 1438. necrosis, *Acer pseudoplatanus*, *Nectria coccinea*, *Diplodina acerina*, pathogenesis 5071. necrosis, *Gnomonia platani*, *Cylindrocarpon heteronema*, *Platanus* 6920.
- Barley**, ochratoxin A biosynthesis, *Aspergillus ochraceus*, *Penicillium viridicatum* 1102. post-harvest decay, storage, long-term effects, microorganisms 1321. storage, factors affecting, fungi disease control 7724.
- Barley stripe mosaic virus**, detection, immunodiffusion, enzyme-linked immunosorbent assay, *Hordeum vulgare* 6757. disease transmission, *Avena sativa*, *Hordeum* 3002. *Hordeum vulgare*, infection, association, protein composition 6779. seed-borne diseases, detection, enzyme-linked immunosorbent assay 7219. virus aggregation, immunoelectrophoresis 3543.
- Barley yellow dwarf virus**, Aphididae, disease transmission, *Triticum aestivum* 9340. Aphididae, infection, *Triticum aestivum*, identification, aerial photography 6762. disease resistance, plant breeding, *Triticum aestivum* 445. disease spread, vascular system, *Triticum aestivum*, *Avena sativa* 9342. disease tolerance, *Triticum aestivum* 365. disease transmission, vectors, Aphididae, *Hordeum vulgare* 9341. enzyme-linked immunosorbent assay, antisera production, rabbits 6297. enzyme-linked immunosorbent assay identification 1768. *Festuca arundinacea* disease reservoirs, disease transmission, role, *Schizaphis graminum*, *Rhopalosiphum padi*, USA, Missouri 1164. Gramineae disease reservoirs, USA, Indiana 1158. Gramineae, host range 1155. infection, effects on overwintering, *Hordeum vulgare* 354. infection, effects on, pathogenesis, cold hardiness, *Triticum aestivum* 9343. infection, *Hordeum vulgare*, *Avena sativa*, effects on, *Sitobion avenae*, *Rhopalosiphum padi*, disease transmission 8553. infection, *Hordeum vulgare*, disease transmission, vectors 3003. infection, + *Sitobion avenae* honeydew effects on *Cladosporium* infection pathogenicity, *Hordeum vulgare*, *Triticum aestivum* 3934. interaction, rust, *Puccinia recondita* f.sp. *tritici*, *Triticum aestivum*, *Puccinia hordei*, *Hordeum vulgare*, *Puccinia coronata* f.sp. *avenae*, *Avena sativa*, pathology 344. strains, transmission interference, *Sitobion avenae* 6749.
- Barley yellow mosaic virus**, disease transmission, *Hordeum vulgare* 5729.
- Basal rot**, *Oryza sativa* nodes, *Fusarium oxysporum*, pathogenicity 3951.
- Base composition**, DNA, electrophoresis, bacteria 7254.
- Basidin**, biosynthesis, *Leuconaucus naucina*, physicochemical properties 6219.
- Basidiobolus**, identification, enzymes, API test 899.
- Basidiomycetes**, antibiotics, antimicrobial activity, bacteria, fungi 2496. biodegradation, USA mines forest products 7792. biosynthesis, aroma compounds 3727. blight, *Poa pratensis*, *Poa annua* 1172. brown rot, wood decay 6936. canker, disease resistance, rootstocks, *Malus* 2259. cultivation, food industry 2047. cultivation, fungi infection 2208. cultivation, methodology 2719. cultivation, pest control 2046. culture, *Chromosporium olearum* infection 9407. decay fungi, *Quercus robur*, ecological distribution 4158. dry bubble disease, *Verticillium fungicola*, wet bubble disease, *Mycogone perniciosa*, cobweb disease, *Hyphomycetes* rosellii, prochloraz, disease control 6824. ecology, decomposition, conferences, books 8167. ectomycorrhizas, nodules, *Rubus* 3208. endo-1,3(4)- β -D-glucanase, affinity exchange chromatography 8302. fruit bodies production, fertilization thinning effects on, forests 6907. fungal flora, seeds, *Compositae* 7726. β -D-glucosidase activity, measuring techniques, use, glucose oxidase 8163. leaf litter decomposition, forest floor 1444. metabolism, hydrazine derivatives, toxicity, mutagenicity, *Salmonella typhimurium*, correlation, animals 1095. mycelia, chitin assays 4517. mycelia, extracts, hemagglutination 13. mycelia, growth, soil, association, plants 1678. pathogens, *Verticillium fungicola*, *Mycogone perniciosa*, resistance, antifungal agents 5826. polysaccharides, antitumor activity, mice 7453. single-cell protein, amino acid composition, chemical composition, physicochemical properties, toxicity testing, animal models 9113. spatial distribution, decomposition, wood, *Fagus sylvatica*, *Quercus robur* 5860. wood decay 3768.
- Basidiomycota**, *Cronartium flaccidum*, spore germination, association, *Pinus nigra*, *Pinus sylvestris*, leaves 4154. *Gymnosporangium fuscum*, spore germination, haustoria, penetration, *Vitis vinifera* 1284. *Sclerotium rolfsii*, role, pathogenesis, blight, *Agrostis tenuis* 9339.
- Batch culture**, bacteria, growth, mathematical models 8132. bacteria recombinants, fermentation kinetics 1979. com fermentation, ethanol biosynthesis, bacteria 134. fermenters, yeasts, oxygen application 5442. growth kinetics, mathematical models 9831. *Lipomyces starkeyi*, computer applications, lipids production 7496. methodology, *Trichoderma reesei*, cellulase, production, comparison 9068. microorganisms, antibiotics biosynthesis 716. phosphate, *Escherichia coli* 878. *Pseudomonas fluorescens*, growth, enzymes production, oxygen tension 109. *Pseudomonas sphaeroides* hydrogen production 1980. *Saccharomyces cerevisiae*, quality control, population dynamics 3818.

Batch culture, (continued)

- Streptomyces fradiae*, tylosin, production, glucose, monosodium glutamate, stimulation 4425.
Streptomyces griseus, phosphates nutrient deficiencies streptomycin production 4383.
Vibrio cholerae, factors affecting, growth, fermenters 2706.
- Baths,**
sterilization, canning, tomatoes pears 262.
water-borne diseases, otitis externa, *Pseudomonas aeruginosa*, man 8070.
- Bavistin,**
effects on, *Cercospora leafspot*, *Arachis hypogaea* 4119.
- BAY 09867,**
quinolones derivatives, antibacterial activity, bacteria, clinical isolates 5171.
- Baylor,**
disease control, fungi, plant diseases, *Malus pumila* 1421.
disease control, *Venturia pinnae*, scab, *Pyrus communis* 1395.
- Bayan,**
disease control, white rot, *Corioli versicolor*, pruning wounds, *Malus pumila* 6873.
- BCC,**
stability, freeze drying 6239.
- Beaches,**
fungi, counting methods 9071.
pollution indicators, sewage, urease activity 3180.
- Beads,**
Desulphovibrio desulphuricans, immobilized cells, cytochrome C3 hydrogenase activity 4666.
Penicillium chrysogenum mycelia morphology association 9985.
- Bean common mosaic virus,**
infection, pathogenicity, lesions, assays, use, *Phaseolus vulgaris* 8542.
infection, *Phaseolus vulgaris*, epidemiology, USA 5600.
mosaic disease, *Phaseolus vulgaris* disease resistance 5815.
Phaseolus vulgaris, plant diseases, pathology 2996.
seed-borne diseases, detection, enzyme-linked immunosorbent assay 7219.
- Bean pod mottle virus,**
detection, enzyme-linked immunosorbent assay, *Ceratoma trifurcata* vectors, Glycine max 3067.
infection, Glycine max, seed-borne diseases, epidemiology 2984.
infection, Glycine max, soybean mosaic virus, enhancement 8541.
transmission, *Vigna unguiculata*, role, *Coleoptera* regurgitation factors 6733.
- Bean yellow mosaic virus,**
disease transmission, *Myzus persicae*, *Acyrtosiphon pisum*, *Pisum sativum* 2101.
infection, *Gladiolus* 3075.
infection, *Vicia faba*, incidence, host range, disease transmission, antigenic characteristics 1128.
mixed infection, cowpea severe mosaic virus, cowpea mosaic virus, symptoms, pathology, *Phaseolus vulgaris* 2994.
mixed infection, *Phytophthora erythroseptica*, *Phytophthora megasperma*, root rot, susceptibility, *Trifolium* 335.
plant viruses, Leguminosae, USA, Tennessee, identification 5689.
- Beans,**
food contamination, growth, *Bacillus cereus*, *Clostridium perfringens* 219.
sprouting, food contamination, *Salmonella*, fungi 3831.
Theobroma cacao, fermentation, thermophilic fungi post-harvest decay 8601.
- Beauveria,**
spores, biological control, eggs, larvae, *Epirix* 985.
toxins, toxicity, biological control, *Epirix* 1106.
- Beauveria basiana,**
clays, coatings, role, survival, soil 7816.
conidia, foliar application, *Solanum tuberosum* leaves, pathogenicity, Leptinotarsa decemlineata, bioassays, biological control 7482.
growth, liquid culture, nutrient sources, carbohydrates 4535.
media (selective), dioxine 3631.
- Beauveria fulvirescens,**
ketones reduction 130.
- Bedding,**
contamination sources, spore-forming bacteria, milk 4812.
hospitals, bacteria contamination 1731.
straw, mycotoxins isolation, *Stachybotrys atra*, toxicity, sheep 4897.
- Beer,**
abattoirs, hot-boning, bacteria contamination, cold storage 244.
bacteria, food contamination, temperature effects on 241.
carcasses, chilling effects on bacteria enumeration 8476.
carcasses, cleaning systems, sanitation 808.
cooking, bacteria survival 210.
electrical stimulation, bacteria, food contamination 185.
fats, microflora, chemical composition 7573.
food contamination, salmonellosis, man, epidemiology, plasmids characterization 8472.
food quality, heat treatments, effects on, bacteria, reviews 6488.
isolation, phages, *Brocothrix thermosphacta*, characterization 7568.
liners, tongue, bacteria growth, packaging, cold storage 287.
minced meat, food contamination, *Alteromonas putrefaciens*, *Pseudomonas putrefaciens* 3841.
packaging, bacteria, growth, contamination 265.
packaging, food contamination, bacteria 224.
packaging, *Staphylococcus aureus*, growth, contamination 272.
Salmonella control, radiation treatment, reviews 8491.
spoilage, *Lactobacillus*, films permeability, vacuum packaging 5635.
survival, *Campylobacter fetus* subsp. jejuni, *Campylobacter fetus* subsp. intestinalis, pH, temperature, effects on 217.
tissues damage, bacteria contamination, organoleptic evaluation 181.
vacuum packaging, oxygen barriers films, bacteria food contamination 261.
vacuum packaging, spoilage, spoilage, *Enterobacteriaceae* 5638.
- Beer,**
aflatoxins contamination 2937.
contamination, *Penicillium crustosum* alkaloids mycotoxins production 8503.
fermentation, dimethyl sulfide role 8405.
fermentation, genetic engineering, yeasts 2859.
fermentation, immobilized cells, yeasts 3745.
fermentation, yeasts, measurements 6636.
fermentation, yeasts, reviews 3746.
filtration, yeasts counting methods, fluorescence 2869.
flavor, yeasts fermentation 2862.
maturation, *Enterobacter aerogenes* acetolactate decarboxylase use 136.
Saccharomyces carlsbergensis proteinase, immunoassays 7322.

Beer, (continued)

- Zymomonas*, media (isolation) 1992.
- Beet curly top virus,**
infection, *Amoracia rusticana* 1313.
- Beet mild yellowing virus,**
Beta vulgaris leaves extracts, detection, enzyme-linked immunosorbent assay 3527.
disease control, deltamethrin, disease transmission, *Myzus persicae*, *Beta vulgaris* 467.
transmission (seed), *Beta vulgaris* 8586.
- Beet mosaic virus,**
infection, pollen germination, *Beta vulgaris* 2163.
- Beet necrotic yellow vein virus,**
vectors, *Polymyxa betae* ultrastructure, *Beta vulgaris* soil-borne diseases 363.
- Beet western yellowing virus,**
infection, *Beta vulgaris*, *Brassica* 2176.
leaf-roll, *Solanum tuberosum*, etiology 5796.
- Beet yellow stunt virus,**
detection, *Sonchus oleraceus* phloem, pathogenesis 4036.
- Beet yellows virus,**
Beta vulgaris leaves extracts, detection, enzyme-linked immunosorbent assay 3527.
disease control, deltamethrin, disease transmission, *Myzus persicae*, *Beta vulgaris* 467.
disease resistance, plant breeding, *Beta vulgaris* 2244.
disease transmission, alarm pheromone derivatives, effects on, *Myzus persicae* 3108.
infection, *Cichorium endivia*, *Lactuca sativa*, *Cucumis sativus*, disease transmission, *Trialeurodes vaporariorum* 9431.
infection, double-stranded RNA isolation, plants 2981.
infection, overwintering, *Beta vulgaris* 3045.
infection, pollen germination, *Beta vulgaris* 2163.
- Beets,**
fermentation, yeasts, ethanol production 7508.
vacuum packaging, spoilage, *Enterobacteriaceae*, *Lactobacillus* 4882.
- Begonia,**
diagnosis, infection, Mycoplasma-like organisms, viruses 2185.
powdery mildew, factors affecting 401.
powdery mildew, fungicides foliar applications, antifungal activity 1393.
- Begonia semperiflora,**
broad bean wilt virus infection 4982.
- Behavior modification,**
dental hygiene, man 8997.
- Beljerinckia,**
hydrocarbons biodegradation, plasmids association 5144.
nitrogen fixation, phylosphere 9590.
nitrogen fixation, rhizosphere, orchards, *Artocarpus heterophyllus*, *Arecia* 9595.
- Bekanamycin,**
antibacterial activity, respiratory tract infection treatment, man 6186.
- Belgium,**
Dutch elm disease distribution, relationship, *Ulmus* sensitivity, *Ophiostoma ulmi* 5080.
Dutch elm disease history surveys 5078.
Erwinia amylovora isolation, Rosaceae, characterization 419.
Gramineae, distribution *Xanthomonas campestris* infection 362.
- Bemisia tabaci,**
disease transmission, mung bean yellow mosaic virus, Thailand 6813.
disease transmission, virus-like particles, *Gossypium hirsutum*, *Sida alba* 2199.
transmission, cowpea mild mottle virus infection, Glycine max, symptoms 1129.
vectors, cowpea mottle virus transmission, *Arachis hypogaea*, Glycine max 4948.
vectors, soybean crinkle leaf virus infection, Glycine max, disease transmission 5672.
- Benz(a)anthracene,**
biodegradation, composting 2875.
metabolites, *Actinomyces* biosynthesis 2822.
- Bencekne gazogenes,**
cycloprodigiosin structure 8377.
- Benincasa hispida,**
fruit rot, pathogenesis 3099.
- Beniowskia sphegoides,**
blight, pathology, *Setaria geniculata* 1184.
- Benodanil,**
antifungal activity, fungi, soil isolates 2286.
disease control, *Rhizoctonia solani*, stem canker, black scurf, *Solanum tuberosum* 5055.
media (selective), soil, fungi 1404.
- Benomy,**
antifungal activity, *Colletotrichum glycine*, *Colletotrichum musae*, *Colletotrichum dematium* var. *truncata* 2285.
antifungal activity, inhibition cutinase, *Fusarium solani* f.sp. *pisii* 1414.
antifungal activity, tolerance, *Trichoderma viride* 3154.
antifungal activity, *Verticillium dahliae* 1412.
+ captan treatment, *Asparagus officinalis* storage 4121.
disease control, *Rhizoctonia solani*, wet blight, Glycine max 5059.
disease control, blight, *Nectria cinnabarina*, *Malus pumila* 4120.
disease control, blue mold, *Penicillium expansum*, association, stem rot, *Alternaria alternata*, *Pyrus communis* 9373.
disease control, *Gaeumannomyces graminis* var. *tritici*, take-all, *Triticum aestivum* 507.
disease control, leafspot, *Apium graveolens* 4098.
disease control, orchards, *Malus* 6874.
disease control, post-harvest decay, guavas 6832.
disease control, powdery mildew, *Vigna radiata* 1433.
disease control, *Rosa canker* 1410.
drug resistance, pathogens, *Mangifera indica* 1532.
drug resistance, *Venturia inaequalis*, characterization 7051.
effects on *Alternaria panax* blight, *Brassica acinaphylla*, *Scheffera arboricola* 6882.
effects on, growth rate, *Monilia fructicola* 1413.
Entomophthoraceae infection, *Aphis fabae*, effects on 489.
foliar applications, *Begonia*, powdery mildew, antifungal activity 1393.
foliar applications, disease control, *Citrus pardisi* greasy spot 5834.
foliar applications, disease control, Glycine max 5060.
+ guazatine, use, control, post-harvest decay, fungi, cantaloupes 6835.
+ heat treatments, seed treatments, *Fusarium moniliforme* elimination, corn 5845.
+ nitrate+calcium oxide, integrated control, *Fusarium oxysporum* f.sp. *lycopersici*, wilt, *Lycopersicon esculentum* 4108.

Subject Index

Benomyl, (continued)

- +nitrate, +calcium oxide, integrated control, Fusarium oxysporum f.sp.lyopersici, wilt, Lycopersicon esculentum 4107.
- paddy fields soil, effects on nitrogen fixation, heterotrophic bacteria 619.
- +potassium sorbate, disease control, fruit rot, Ficus carica 1396.
- resistance, Botrytis cinerea 1531.
- resistance, genes, Venturia inaequalis 5152.
- resistance, Monilinia fructicola, blossom blight, disease control, Prunus persica 5835.
- resistance, Monilinia, measuring techniques, media 7887.
- resistance, Prunus persica, Monilinia fructicola infection, comparison treatment, captan, prochloraz 5719.
- resistance, Sclerotinia homoeocarpa 6010.
- resistance, Venturia inaequalis 4269.
- resistance, Venturia inaequalis 4270.
- resistance, Venturia, measuring techniques 7886.
- seed treatments effects on Glycine max 5844.
- soil fungistasis, Secale cereale 5836.
- treatment, brown spot, Drechslera oryzae, Drechslera sorokiniana, Zizania aquatica 2272.
- treatment, Erysiphe graminis powdery mildew, Triticum, drug resistance 2126.
- treatment, footrot, Pseudocercospora herpotrichoides, Triticum aestivum 2284.
- urban leaf crinkle virus infection, Vigna radiata, effects on disease transmission 3152.
- use, disease control, dieback, Vitis vinifera, USA, Michigan 6881.

Bentonite

- enterovirus immobilization, bacteria contamination, ethanol bactericidal activity 3523.

Benzaldehyde

- association, ampicillin stabilization, aqueous solutions 5253.
- conversion, benzyl alcohol production, Rhodotorula mucilaginosa immobilized cells 8440.
- oxidation, Hyphomicrobium, characterization 2007.
- benzalkonium chloride, disinfectants aerosols, airborne microorganisms 5346.
- +oxacillin, binding heart prosthetics, prophylaxis, postoperative infection, dogs 5343.

Benzene

- biodegradation, soil microorganisms 6952.

Benzenedithiol

- antifungal activity 2473.

Benzethonium chloride

- +methoxyethylene+maleic acid, antibacterial activity, in vivo, in vitro 6041.
- mouthwashes, effects on dental plaque formation, man 8989.

Benzimidazole

- antifungal activity, Ceratocystis fimbriata f.sp.platani 694.
- derivatives, antiviral activity, tomato mosaic virus 7951.
- derivatives, Ceratocystis ulmi Dutch elm disease prophylaxis, Ulmus americana 1458.
- derivatives, plants disease control, Rhizoctonia 490.
- effects on Melampsora larici-populina growth, leaves culture, Populus 6890.
- sensitivity, Penicillium digitatum, association spoilage synergism, oranges 1318.

Benzimidazoles

- antifungal activity, structure-activity relationships 4104.
- resistance, Cercospora beticola, measuring techniques, in vitro, Beta vulgaris 7889.
- resistance, Venturia inaequalis 4269.

Benzolac acid

- derivatives, Aspergillus niger biodegradation 6649.
- inhibition, trimethylamine-N-oxide reductase, Escherichia coli 269.
- production, Malus pumila fruits, disease resistance, Nectria galligena 4081.
- yeasts sensitivity 7093.

Benzothiazoles

- antifungal activity, structure-activity relationships 4104.

Benzothiophanes

- biodegradation, hydrocarbon-degrading bacteria, oil dispersants effects on 8717.

Benzoxazoles

- antifungal activity, structure-activity relationships 4104.

Benzoyl peroxide

- antibacterial activity, antifungal activity 7064.

5-Benzoylamino-3-methyl-4-isoxazolocarboxylic acid

- derivatives, synthesis, antibacterial activity 2446.

Benzyl alcohol

- production, benzaldehyde conversion, Rhodotorula mucilaginosa immobilized cells 8440.

Benzyl viologen

- inactivation glutamine synthetase, Azotobacter chroococcum 1868.

N-Benzylidithiocarbamic acid

- derivatives, antifungal activity 9678.

Benzylpenicillin

- antibacterial activity, Staphylococcus, clinical isolates 8804.
- antibiotic resistance, Escherichia coli, urinary tract clinical isolates 7034.
- +ethonium, antibacterial activity, bacteria 1558.
- Methanobacillus kuznetsovii, effects on methane formation 2551.
- production, water, butylacetate effects on 7148.
- synergism, bile acids, antibacterial activity, Staphylococcus 1618.

Berberine sulfate

- antifungal activity 7928.

Berberia

- taxonomy, rust, Cumminsella 423.

Berries

- Banksia integrifolia, oils composition effects on wine flavor, yeasts alcoholic fermentation 6639.

Bestatin

- analogs effects on enkephalin hydrolysis, Pseudomonas, Chromobacterium violaceum, enzymatic activity 7551.
- Streptomyces, synthesis 8389.

Beta

- plant breeding, disease resistance, root rot, Erwinia 1376.

Beta vulgaris

- beet mild yellowing virus, potato virus Y, beet yellows virus, disease transmission, Myzus persicae, disease control, deltamethrin 467.
- beet mild yellowing virus transmission (seed) 8586.
- beet western yellows virus infection 2176.
- beet yellows virus infection, overwintering 3045.
- crop production, bacteria pathogenicity effects on 403.

Beta vulgaris, (continued)

- crop rotation, insecticides, herbicides, effects on, fungi, soil 618.
- damping-off, Pythium ultimum, inhibition, Agrobacterium radiobacter
- Polysaccharides seed treatments 7710.
- dyes, purification, fermentation, Aspergillus niger, Saccharomyces oviformis 7470.
- dyes, purification, use, fungi 9086.
- genetic analysis, disease resistance, Erysiphe polygoni, powdery mildew 4096.
- leaves extracts, detection, beet yellows virus, beet mild yellowing virus, enzyme-linked immunosorbent assay 3527.
- measuring techniques, Cercospora beticola, benzimidazoles resistance 7889.
- plant breeding, disease resistance, beet yellows virus 2244.
- pollen germination, beet mosaic virus, beet yellows virus infection effects on 2163.
- powdery mildew, downy mildew 2217.
- powdery mildew, Erysiphe polygoni, sulfur foliar applications disease control 5823.
- Pythium aphanidermatum inoculum density, crop fields, irrigated, USA, Arizona 426.
- Pythium rot, biological control, Enterobacter cloacae seed treatments 9481.
- Rhizoctonia adrethoidii infection, phytoalexins formation 2260.
- root rot, crown rot, Thanatephorus cucumeris virulence 5008.
- root rot, disease control, sulfur 3157.
- root rot, Rhizoctonia solani, cultivation techniques 1279.
- roots, feeds, fungi patulin incidence 1089.
- roots, Phoma betae infection, symptoms 3996.
- roots, Plectonella-like organisms, vectors, Plesia quadratum 6810.
- sludge, lactac acid bacteria, inoculum, effects on, fermentation 3854.
- soil-borne diseases, beet necrotic yellow vein virus vectors, Polymyx beta ultrastructure 363.
- Betula papyrifera**, infection, Inonotus obliquus, pathogenesis 1450.
- Betula pendula**, seedlings, mycorrhizas inoculation 5857.
- Betula pubescens**, seedlings, mycorrhizas inoculation 5857.
- Beverage industry**, heat exchange cleaning systems, bacteria contamination 4784.
- Beverages**, production, enzymes use, USSR 6677.
- sweeteners, α -L-aspartyl-L-phenylalanine methyl ester, organoleptic evaluation, spoilage 3803.
- BGM cells**, Chlamydia trachomatis growth 3601.
- BHK cells**, rabies virus vaccines production 7190.
- BHK-21 cells**, pseudorabies virus infection, antiviral activity, 9-(2-hydroxyethoxymethyl)guanine + amphotericin B 3351.
- Blalaphos**, biosynthesis, Streptomyces hygroscopicus mutants, phosphinic acid derivatives 4570.
- biosynthesis, Streptomyces hygroscopicus, protoplasts, cell fusion 9781.
- Streptomyces hygroscopicus, biosynthesis 3716.
- Streptomyces hygroscopicus, biosynthesis, carbon+phosphorus bonds 2824.
- Blibenzyle**, Bluetia striata, antibacterial activity 7079.
- Bibliographies**, coal, industrial sites, industrial effluents 1699.
- disinfection, waste water, microbiology, methodology 1698.
- disposal, treatment, sludges 1697.
- petroleum, industrial sites, industrial wastes, environmental effects 2609.
- pulp mills, industrial effluents, wastewater treatment, environmental effects 2608.
- spillage, fruits, nuts, microscopy 5034.
- waste water, soil amendment, agricultural practices, microbiology 2607.
- Wastewater treatment, industrial effluents, dairy industry 1695.
- Wastewater treatment, industrial effluents, fermentation 1694.
- Wastewater treatment, industrial effluents, textile industry 1696.
- Wastewater treatment, microbiology 5309.
- Wastewater treatment, water quality, microbiology, environmental effects 2606.
- Bicozamycin**, antibacterial activity, Enterobacteriaceae 9636.
- Bicyclomycin**, antibacterial activity 2595.
- Bidens plicata**, tissue culture, 1-phenylhepta-1,3,5-triene accumulation, Pythium aphanidermatum culture filtrates 5754.
- Bifidobacterium**, antibiotic sensitivity testing, antibiotic resistance 8724.
- counting methods, dairy products, pharmaceuticals, 175.
- Bifidobacterium bifidum**, isolation, cells, methodology 8130.
- media (culture), methodology, isolation, mutants 8133.
- Bifonazole**, antifungal activity, dermatophyte fungi, yeasts 7938.
- Big vein disease**, lettuce big vein virus, methyl bromide, carbendazim, disease control, Lactuca sativa 6889.
- Biganide hydrochloride**, derivatives, denaturation β -lactamase, Staphylococcus aureus 3702.
- Bim**, tolerance, Streptococcus agalactiae 5399.
- Bile acids**, bioassays, bacteria, luiferase + 3 α -hydroxysteroid dehydrogenase 9020.
- bioassays, Pseudomonas testosteroni 3 α -hydroxysteroid dehydrogenase, yeasts, alcohol dehydrogenase, Clostridium kluyveri dihydroipamide reductase (NAD+) 4504.
- catabolism, Pseudomonas, Actinomycetes 149.
- conversion, fungi 3798.
- Eubacterium lentum, biodegradation 5576.
- Hydroxylation, anaerobic bacteria 2892.
- resistance, Staphylococcus aureus, association antibiotics sensitivity 2406.
- synergism, benzylpenicillin, furagin, antibacterial activity, Staphylococcus 1618.

- lie salts**, effects on recovery, *Yersinia enterocolitica* 672.
- myria novae-zealandiae**, mycorrhizas, roots colonization, seasonal variations, *Trifolium repens* 554.
- oocclusion**, cadmium, microorganisms, pollution effects 794.
- ossays**, aflatoxins, use *Lilium longiflorum* pollen 5641.
- antibiotics antibacterial activity, media (culture) 7972.
- Bacillus stearothermophilus*, β -lactam antibiotics, milk 721.
- Bacillus subtilis* exo-1,4- α -D-glucosidase 4681
- Bacillus subtilis* spores, antimicrobial agents, urine 9708.
- bacteria, hydrogenase, activity 6336
- bacteria proteinase, screening projects 3599.
- bile acids, bacteria, luciferase + 3 α -hydroxysteroid dehydrogenase 9020.
- bile acids, *Pseudomonas testosteroni* 3 α -hydroxysteroid dehydrogenase, yeasts alcohol dehydrogenase, *Clostridium kluyveri* dihydrolipoamide reductase (NAD+) 4504.
- colorimetry, quantitation, defective-interfering particles, respiratory syncytial virus 7230.
- Corynebacterium, detection staphylococci 6224.
- detection, chitin, rust, fungi, Leguminosae 6737.
- detection, mycotoxins, fungi, food 2939.
- detection, Verticillium dahliae, tissues, Solanum tuberosum, disease resistance 9063.
- Enterobacter xanthine oxidase, phosphorus 5413.
- Escherichia coli, acetyl-CoA, aminoglycoside antibiotics purification 3415.
- folic acid, cyanocobalamin, serum levels, man, Lactobacillus leichmannii use 885.
- gentamicin blood levels 8856.
- gentamicin, cefotaxime 4385.
- Helminthosporium maydis, phytotoxins, use, Zea mays, roots, cells 8552.
- indicator species, Bacillus subtilis, Staphylococcus aureus, Micrococcus luteus, Klebsiella pneumoniae, drug sensitivity testing 6039.
- β -lactam antibiotics, Bacillus stearothermophilus, milk 720.
- luciferin 4-monooxygenase (ATP-hydrolysing), ATP levels, bacteriuria 9928
- luminescent bacteria, toxicity testing, water 3572.
- milk (culture), antibiotics activity 7970.
- Mycobacterium avium, ionized, serum levels 2421.
- neutralization, herpesvirus, computer applications 7229.
- Phytophthora cinnamomi, soil, Abies fraseri seedlings, Rhododendron obtusum leaves 324.
- Phytophthora cinnamomi, soil distribution, plant diseases 539.
- root rot incidence, USA, Wisconsin 3923.
- thin-layer chromatography, B-D-glucosidase, activity, use, Penicillium expansum 7270.
- toxicity, aflatoxin M1, milk 3877.
- uronic acid, association cell membranes polysaccharides, microorganisms 5365.
- water quality, reviews 2602.
- lochanin A**, biodegradation, Nectria haematococca 8434
- lochemical analysis**, Moloney leukemia virus, virions, infection, cells, interferon, antiviral activity 699.
- phytolignins, isolation, Pythium aphidanimetum, characterization 1098.
- viruses, isolation, reservoirs, physicochemical properties 795.
- lochemical characteristics**, Bordetella pertussis, antibiotics effects on 1596.
- gram-negative bacteria, identification, API test, blood culture 839.
- coccharomyces cerevisiae, Candida valida, fermentation, alcoholic beverages 243.
- soils (loam), enzymes 582.
- lochemical oxygen demand**, determination, organic chemicals, inoculum, carbon sources, nitrogen sources effects on 9802.
- loccides**, antifungal activity, Fusarium oxysporum 5973.
- cooling towers, antimicrobial activity, Legionella pneumophila 5221.
- poly(hexamethylene biguanide hydrogen chloride), use food industry 2450.
- 4-quinolones, 5,6,7,8-tetrahydro-4-quinolones, synthesis 5224.
- logradation**, Acetor pseudoplatanus, Nectria cinnabarina, Calospora innesii, Eutypa acharii, ecological distribution 4181.
- Alcaligenes faecalis, 3-cyclohexanecarboxylic acid 1053.
- alkylbenzene sulfonates, microorganisms, association, aromatic compounds 1997.
- p-aminazobenzene, Bacillus subtilis 2006.
- 6-aminoheptanoic acid, bacteria 3783.
- anaerobic bacteria, cyanuric acid, cysteine, atrazine 2900.
- anieline, Rhodococcus 7556.
- aphidicolin, microorganisms 4752.
- aromatic compounds, catechol, Phanerochaete chrysosporium 7544.
- aromatic compounds, Rhizobium 3784.
- aromatic compounds, yeasts, heterotrophic bacteria, isolates, mangrove swamps sediments 9253.
- arylglycerol- β -pyringenolol ethers, mechanisms, lignin models, Fusarium solani 6651.
- Aspergillus niger, phenoxycetic acid, benzoic acid, derivatives 6649.
- bacteria, fungi, conferences 2729.
- bark, Cnarium schweinifurthii, thermophilic fungi 550.
- benzene, soil microorganisms 6952.
- benzothiohenes, dibenzothiohenes, hydrocarbon-degrading bacteria, oil dispersants effects on 8717.
- biochanin A, Nectria haematococca 8434.
- carrot plant debris, lakes, USA, Alaska, nutrient enrichment effects on 2023.
- β -casein, Escherichia coli, Pseudomonas fluorescens 2020.
- catechol, chlorocatechol, soil microorganisms 6967.
- Cellulomonas, cellulose, 1,3- β -D-xylanohydrolase, cellulase 154.
- cellulose acetate reverse osmosis membranes, bacteria, fungi 2883.
- cellulose, Ascomycetes mutants 165.
- cellulose, cellulolytic enzymes, Colvibrio givus 8417.
- cellulose, cellulolytic microorganisms, crop fields, agricultural practices,
- Biodegradation, (continued)**
- fertilizers effects on 5982
- cellulose, Cephalosporium sacchari cellulase, oligosaccharides structure 4674.
- cellulose, Chaetomium cellulolyticum, biomass production 5592.
- cellulose, Clostridium thermocellum, comparison, mesophilic bacteria, sugar production 9251.
- cellulose, Penicillium funiculosum, rheology 166.
- cellulose, Phanerochaete chrysosporium, nitrogen sources effects on 3770.
- cellulose, soil, measuring techniques 1058.
- cellulose, Trichoderma, straw 7539.
- cellulose, wood, fungi effects on cellulolytic microorganisms 2005.
- characterization, p-coumaric alcohol, Aspergillus flavus 164.
- chlondazon, thiosulfate sulfurtransferase, bacteria 156.
- cholesterol, Nocardia, media (culture) effects on 2893.
- cotton, pretreatment, ozone, sodium hydroxide, carbohydrate-degrading bacteria, rumen microorganisms 1062.
- crop residues, Oryza sativa, mesophilic microorganisms 168.
- cutin, soil microorganisms 5931.
- cycloheptanone, Nocardia 2014.
- 2,4-D, glucose association, microorganisms 9266.
- 2,4-D, glucose stimulation, bacteria, soil 782.
- defective mutant, Sarcina alba, serine, production 6382.
- detergents, Pseudomonas fluorescens 2874.
- 12,14-dichlorodehydroabietic acid, Mortierella isabellina 6657.
- dichlorvos, Pseudomonas 5584.
- dodecyltrifluorooxysulfate, Penicillium 148.
- dyes, anaerobic conditions 8423.
- ethanolol, Penicillium simplicissimum 167.
- Eucalyptus leaf litter, relative humidity, substrates water content effects on 153.
- explosives, industrial wastes, reviews 5578.
- fatty acids, bile acids, Eubacterium lentum 5576.
- flusulfonothion, soil microorganisms 7538.
- fuels, microorganisms 5960.
- fungi, forest products, fungicides treatment 1400.
- fungi, hetero-organic coatings resistance 2384.
- fungi, Populus tremuloides, leaf litter 8045.
- gallic acid, soil microorganisms, bacteria 7563.
- glycols, industrial pollution, measuring techniques 5577.
- guanine, adenine, cytosine, thymine, uracil, soil 5690.
- guar gum, Bacteroides ovatus 172.
- Gymnosaurus reesi, lomatinde 3773.
- herbicides, MCPB, pathway, soil types 5971.
- herbicides, molinate, soil types, pathway, flooded soils 5886.
- herbicides, Pseudomonas maltophilia, heat treatments, soil 5904.
- hexamine, Bacillus 7559.
- hydrocarbons, aromatic compounds, Cunninghamella elegans, bacteria 3263.
- hydrocarbons, Beijerinckia, plasmids association 5144.
- hydrocarbons, sediments, oil installations, marine environment 2392.
- hydroquinone, fungi, bacteria, yeasts, activated sludge 8427.
- IBP, flavoprotein-linked monooxygenase, Pycnaria oryzae 5590.
- indole, Alcaligenes 8450.
- industrial wastes, soaps, detergents, reviews 5578.
- industrial wastes, soil microorganisms, land disposal, books 6360.
- industrial wastes, soil microorganisms, oil and gas industry, land disposal, petroleum 5983.
- leaf litter, fungi 3771.
- leaf litter, organic matter, microorganisms, alpine environments, Austria 9556.
- leaf litter, polyglactulose, Hyphomycetes 2003.
- lignin, dissolved oxygen transfer, Phanerochaete chrysosporium 5588.
- lignin, fungi, Pinus, straw 171.
- lignin, Hyphomycetes 3777.
- lignin, metabolism, Phanerochaete chrysosporium 3778.
- lignin, Phanerochaete chrysosporium 5589.
- lignin, Phanerochaete chrysosporium 6644.
- lignin, Phanerochaete chrysosporium, association, dyes decolorization 6646.
- lignin, Phanerochaete chrysosporium, nitrogen sources effects on 2880.
- lignin, Phanerochaete chrysosporium, products association 2902.
- lignin, Phanerochaete chrysosporium, role, hydroxyl radicals 2001.
- lignin, Pleurotus ostreatus 5598.
- lignin, Sporotrichum pulverulentum, Trichosporium capitatum 1998.
- lignin, Streptomyces viridosporus 2887.
- lignocellulose, comparison, softwoods, Coriolus versicolor, Poria placenta 170.
- lignocellulose, microorganisms 3800.
- lignocellulose, Sporotrichum pulverulentum comparison Dichomitus squalens 1999.
- lignocellulose, thermophilic fungi 6641.
- lignocelluloses, cellulolytic microorganisms, feeds production 9252.
- lignocelluloses, Chaetomium cellulolyticum, single-cell protein production, nutritive value, toxicity testing, laboratory animals 9116.
- lignocelluloses, Fusarium 9261.
- lignosulfonate, Penicillium, metabolism, media (enrichment) 3797.
- litter, forest floor, Collybia maculata, Collybia butyracea, Collybia distorta, Abies alba 1442.
- lubricants, surfactants, microorganisms 9255.
- maackian, Sclerotinia trifoliorum 2000.
- man-made products, environmental effects 4758.
- marine pollution, nitritolactate acid, marine microorganisms, bacteria 5323.
- meocrop, soil microorganisms 2878.
- metabolites, sterols, Mytilus edulis, microorganisms 7554.
- N-methyl-2-pyrrolidone, bacteria sewage 2017.
- methymercury, Escherichia coli, Pseudomonas fluorescens 1996.
- microorganisms association, animal wastes waste treatment 2616.
- microorganisms, production, fatty acids, antifungal activity, Calluna vulgaris heaths soil, seasonal variations 5930.
- microorganisms, respiration, radioactive labelling 3509.
- microorganisms, straw, role, soil, volcanic ash, stabilization 5091.
- milk, microorganisms, soil 153.
- naphthalene, stereospecific, Cunninghamella elegans 7019.
- naphthoycin A, Penicillium gladioli, 2,3-dicarboxy-4-methoxy-5-methylbenzoic acid biosynthesis 12.
- nitrotriatic acid, water hardness effects on, activated sludge 2611.
- nitrotriatic acid, water hardness effects on, activated sludge 2612.
- nitroamines, Pseudomonas 5581.
- nitrofen pesticide residues, persistence, mobility, soil microorganisms, Canada 8704.
- n-nitrophenol, Bacillus, Pseudomonas 2013.

Biodegradation, (continued)

- ochratoxin A, *Phenyllobacterium* immobile 6656.
O-C-methyl phosphorothioate, pesticides (organophosphorus) derivatives.
Pseudomonas, *Thiobacillus thioarans* 3787.
odors compounds, *Pseudomonas*, *Bacillus*, *Corynebacterium* 5580.
oil, bacteria, marine environment 8719.
oil, microorganisms 5147.
oil, waste disposal, soil properties 7020.
organic matter, bacteria, hydrogen intermediates 2011.
oxalic acid, aquatic environment, sediments, bacteria 7543.
phenol, rhizosphere microorganisms, *Oryza sativa* 2897.
Pavo cristatus feathers, keratinophilic fungi 7555.
PCB, *Acinetobacter* 8429.
PCB, bacteria, rivers sediments isolates 8421.
PCB, *Nocardia* 2895.
peat, anaerobic conditions, C/N ratios 9264.
peat, microorganisms 2877.
pentachlorophenol, *Arthrobacter* 5583.
pentachlorophenol, *Arthrobacter*, soil 2891.
pesticides, soil microorganisms 9531.
pesticides, soil microorganisms, mathematical models 161.
petroleum, *Candida tropicalis*, *Yarrowia lipolytica* 5992.
petroleum, hydrocarbons, *Mycobacterium* 7969.
petroleum, *Pseudomonas* desmolyticum, sulfur metabolism 5991.
phenmedipham, soil pH effects on mineralization 5926.
phenol, bacteria, sewage sludge 8941.
phenol, soil microorganisms, chemical pollution 8420.
phenol, *Streptomyces setonii* 2895.
phenylalanine, catechol-2,3-dioxygenase, bacteria 157.
phenylureas, acid anilides, gram-negative bacteria 2898.
phosfolan, *Rhizoctonia solani*, *Penicillium chrysogenum*, *Trichoderma viride* 5586.
phospholipids, triacylglycerols, cholesterol, microorganisms 2881.
phytol, aquatic bacteria 5595.
 α -pinene, *Pseudomonas maltophilia* 5582.
Pinus radiata, stands, leaf litter, fungi 3796.
plant debris, microorganisms, acids effects on, lakes, polar environments 1995.
plants lignin, carbon incorporation, soil 5599.
polycyclic aromatic hydrocarbons, composting 2875.
polyethylene glycol, thiylene glycol, *Methanobacterium*, desulfotribio 8430.
polyethylene glycol, *Pelobacter venetianus* sp. nov. 6645.
Populus, lignin, fungi 6652.
propionate, pathway, methanogenic bacteria, mixed culture 4748.
proteolytic enzymes, *Escherichia coli* colicins, association, production 4397.
Pseudomonas incognita, linylal acetate 2901.
Pseudomonas putida, alkanes 626.
Pseudomonas putida, xenobiotics, dehalogenase 2884.
Pseudomonas 2,4-dichlorophenoxyacetic acid 4759.
resorcinol, salicylate, *Aspergillus niger* 3774.
rubber, *Deuteromycetes* 1994.
rumen microorganisms, *Vitis vinifera* stems, oxidation pretreatment 2009.
Saccharomyces cerevisiae, oxygenase, reviews 3667.
silyl alcohol, *Schizophyllum commune* 162.
sodium dodecyl sulfate, antibacterial activity, *Pseudomonas aeruginosa* 9254.
Sporotrichum pulverulentum, lignosulfonates, polyacrylic acid effects on 6643.
starch, activity, *Aspergillus awamori* var. *kawachi* chitin immobilized enzymes.
 α -amylase 106.
sterols, *Nocardia erythropolis* enzymes 1948.
straw, *Pleuronotus ostratus* 5587.
styrene, pathways, *Pseudomonas fluorescens* 8433.
sulfur compounds, petroleum, bacteria 5597.
surfactants, *Bacillus*, *Pseudomonas*, in vitro 8432.
surfactants, estuaries 5596.
2,3,4-tetrahydrophthalene, *Pseudomonas stutzeri* 8718.
2,4,5-trichlorophenoxyacetic acid, *Pseudomonas cepacia* 1059.
2,4,6-trichlorophenyl acetate, *Pseudomonas cepacia*, soil contamination 4750.
tridecane, metabolic pathways, α,ω -tridecanedioic acid, *Candida tropicalis* 2002.
Triticum, straw, soil, *Cephalosporium gramineum*, effects on 8451.
USA mines forest products, *Basidiomycetes* 7792.
wheat gluten, microorganisms, storage conditions 2915.
wood, biological activity, soil microorganisms, forests, Canada 8893.
wood, mycorrhizas, use, inoculum, *Tsuga heterophylla* 529.
wood preservatives, soil microorganisms, land disposal, reviews 5985.
wood, agrochemicals, effects on, *Trichophyton alioi* 5593.
xanthine, *Streptomyces viridivolutus* 5602.
xenobiotics, aquatic environment, microenvironments, microorganisms 4762.
xenobiotics, microorganisms, factors affecting 3788.
xylan, *Bacillus*, *Cellulomonas*, *Streptomyces* 1060.
xylan, Bacteroides endo-1,3- β -D-xylanase, intestinal microflora, man 2022.
Zea mays crop residues cell walls, *Chaetomium cellulolyticum*, protein bicyclics 8418.
- Biodegradation,**
bacteria, oil pipelines, Canada, hydrogen sulfide production association 7018.
fungi, bacteria, fouling organisms, control, oil, forestry products, effluents.
Gramineae, books, conferences 10004.
fungi infection, *Vigna radiata*, seed-borne diseases 3915.
fungi, products, tropical environment 10004.
man-made products, environmental effects 4758.
- Biofilms,**
bacteria, wastewater treatment, population studies 5300.
- Biogeochemistry,**
books, conferences 7279.
gold, bacteria, actinomycetes, fungi 7013.
nitrogen cycle, regulation, soil microorganisms, agricultural ecosystems 3221.
- Biological control,**
activity, *Bacillus thuringiensis*, *Bacillus sphaericus* cell culture, *Aedes aegypti* larvae 7486.
activity, *Bacillus thuringiensis*, *Bacillus sphaericus* cell culture, *Aedes aegypti* larvae 8349.
Adoxophyes orana, nuclear polyhedrosis virus, association granulosis virus effects on *Cydia pomonella* 8354.
Aeschynomene virginica, weed control, *Colletotrichum gloeosporioides* f. sp. *aeschynomene*, *Oryza sativa* 6630.
Agrobacterium crown gall, *Carya illinoensis*, use, *Agrobacterium radiobacter*, USA, Georgia 3971.

Biological control, (continued)

- Agrobacterium radiobacter, crown gall, *Agrobacterium tumefaciens*, Phaseolus vulgaris 2838.
Amelomyces quisqualis, hyperparasitism, *Sphaerotheca fuliginea*, powdery mildew Cucumis sativus 2275.
Bacillus sphaericus, heat inactivation, larvae, *Anopheles stephensi* 6612.
Bacillus sphaericus, histopathology, toxicity, larvae, *Culex fatigans* 8363.
Bacillus sphaericus, larvae, *Culicidae* 6611.
Bacillus sphaericus, persistence, aquatic environment, *Culicidae* 1024.
Bacillus sphaericus, powder production, *Insecta* 1023.
Bacillus subtilis, rust, *Uromyces phaseoli*, *Phaseolus vulgaris* 9498.
Bacillus subtilis, use, *Sclerotium cepivorum* white rot, *Allium* 6592.
Bacillus thuringiensis + *Apanteles melanoscus*, pathogens, *Lymantria dispar* 2832.
Bacillus thuringiensis δ -endotoxin, cytotoxicity, *Culicidae* 1018.
Bacillus thuringiensis δ -endotoxin, histopathology, larvae, *Aedes aegypti* 1019.
Bacillus thuringiensis, *Aedes taeniorhynchus*, salt marshes 7461.
Bacillus thuringiensis, *Anopheles atroparvus*, *Culex pipiens*, *Culex molestus* 4712.
Bacillus thuringiensis, *Anopheles quadrimaculatus*, paddy fields, *Oryza sativa* 6601.
Bacillus thuringiensis, *Bacillus sphaericus*, *Mettarrhizium anisopliae*, *Culex quinquefasciatus* 2836.
Bacillus thuringiensis crystals, *Aedes aegypti* larvae, potassium carbonate effects on 4717.
Bacillus thuringiensis, *Culex tarsalis*, paddy fields, *Oryza sativa* 6599.
Bacillus thuringiensis, *Culicidae*, larvicides, pesticide applications, methodology, equipment, *Bacillus thuringiensis* 9204.
Bacillus thuringiensis, *Doryctina amatella*, persistence, *Pinus taeda* 7484.
Bacillus thuringiensis, disease control, *Simulium damnosum*, vectors 1020.
Bacillus thuringiensis endotoxins, pathogenicity, *Achaea janata* 1038.
Bacillus thuringiensis, field trials, *Culicidae* 1030.
Bacillus thuringiensis, field trials, larvae, *Simulium damnosum* 6609.
Bacillus thuringiensis, field trials, *Simulium soubrense-sancipauli* 1026.
Bacillus thuringiensis, foliar applications, *Choristoneura fumiferana* 6614.
Bacillus thuringiensis, insecta, developing countries, research programs 1027.
Bacillus thuringiensis, larvicides, *Culicidae* 6600.
Bacillus thuringiensis, *Lymantria dispar*, *Dendrolimus spectabilis*, *Hyphantria cunea*, dose-response effects, mathematical models 8362.
Bacillus thuringiensis, *Lymantria dispar*, parasitism, *Rogas lymantria* 7477.
Bacillus thuringiensis, *Necturus* 5559.
Bacillus thuringiensis, *Ostrinia nubilalis* 8375.
Bacillus thuringiensis, pathogenicity, mortality, *Glossina pallidipes* 984.
Bacillus thuringiensis, persistence, *Culex pipiens* 1008.
Bacillus thuringiensis, pest control, *Slipnotia salicis* 3718.
Bacillus thuringiensis, *Spodoptera frugiperda* 5550.
Bacillus thuringiensis, *Spodoptera littoralis* 9224.
Bacillus thuringiensis spores, persistence, leaves, *Lepidoptera* 1006.
Bacillus thuringiensis spores, persistence soil, *Insecta* 1007.
Bacillus thuringiensis, storage, larvae, *Simulium damnosum*, tropical environment 6610.
Bacillus thuringiensis subsp. *israelensis*, *Psorophora columbiae*, paddy fields, *Oryza sativa* 6597.
Bacillus thuringiensis subsp. *israelensis*, *Simulidae*, streams 6602.
Bacillus thuringiensis subsp. *israelensis* spores, toxicity, *Aedes aegypti* 4713.
Bacillus thuringiensis, Thunckide 168, Dipe 88, *Choristoneura fumiferana* 9222.
Bacillus thuringiensis var. *israelensis*, pathogens, *Culex pipiens molestus* 2075.
Bacteria, *Insecta*, commercial species, marketing 1021.
bacteria, *Insecta*, interference, sap, host plants 2831.
Bacteriophage, pest control, *Chilo infuscatellus*, *Trypoxys nivella* 1042.
baculovirus, pathogenicity, *Bombyx mori*, nontarget organisms 9207.
baculovirus, *Tortricidae* 997.
Beauveria, eggs, larvae, *Epirix* 985.
Chaetomium olivaceum, *Agaricus bisporus*, *Bacillus* use 3052.
Chaetostereum purpureum, silver leaf, *Prunus domestica* 4067.
Chytridiomycetes, *Zygomycetes*, life cycle, *Insecta* 1015.
Colletotrichum gloeosporioides f. sp. *aeschynomene*, *Aeschynomene virginica* 2835.
crown gall, *Agrobacterium tumefaciens* agrocins, purification, host range 4716.
cryoinjury, *Zea mays*, *Erwinia herbicola*, inhibition, *Pseudomonas syringae*, ice nuclei, activation 8642.
Culex pipiens, *Mettarrhizium anisopliae*, conidia, viability, characterization 7479.
Culicidae, *Bacillus thuringiensis* subsp. *israelensis* δ -endotoxin 5553.
Culicidae larvae, association *Bacillus thuringiensis* subsp. *israelensis* plasmids 2842.
Culicidae larvae, use *Bacillus thuringiensis* δ -endotoxin, toxicity, stability 294.
Culicidae, strains comparison, *Culicomyces clavosporus* 6591.
Culicomyces clavosporus, *Lagenidium giganteum*, *Aedes taeniorhynchus* 2834.
Culicomyces clavosporus, pathogenicity, mortality, *Simulium vittatum* 9209.
Cydia pomonella, fruit trees, granulosis virus 8353.
damping-off, *Rhizoctonia solani*, in vitro, *Trichoderma harzianum* 2854.
Deuteromycetes, culture, spores production, *Culicidae* 1807.
Deuteromycetes, life cycle, pathogenicity, *Culicidae* 1012.
Enterobacter cloacae seed treatments, *Fythium rot*, *Beta vulgaris*, *Cucumis sativus*, *Pisum sativum* 9481.
Entomophthorales, *Agrobacterium*, *Gramineae* 8360.
Entomophthorales, *Psila rosae*, field trials 9210.
Epirix, *Beauveria* toxins, toxicity 1106.
Erwinia herbicola, bacteria, ice, nuclei, activation, cryoinjury, *Zea mays* 8643.
Erynia neophaedis conidia, *Aphididae* 8361.
Erynia phytomyi, *Hypera postica*, kocide effects on 7485.
fungi, antifungal activity, *Brevibacterium linens* 2837.
fungi, pathogens, larvae, *Culicomyces* 1013.
fungi, *Venturia inaequalis* scab, *Malus pumila* 5825.
fungi, weed control, *Convolvulus curvatus* 414.
Fusarium moniliforme var. *subglutinans*, *Hemosepilachna vigintioctopunctata* 1034.
granulosis virus, *Agrotis segetum*, production methodology 8359.
granulosis virus, *Arthropoda*, *Malus* 8355.
granulosis virus, *Cydia pomonella*, field trials 8357.
granulosis virus, production, mass rearing, larvae, *Agrotis segetum* 9211.
granulosis virus, *Tortricidae*, *Cydia pomonella* 8356.
Heliothis virescens, larvae, *baculovirus* 4719.
herbicides, microorganisms 5546.
Insecta, bacteria, fungi, viruses 7471.
Insecta, developing countries 1028.
Insecta, nuclear polyhedrosis virus safety studies, animal models 4710.

biological control, (continued)

insecta pathogenicity plants, viruses, fungi, books 9093.
 insecta, pest control, pathogens, methodology, dissemination, fungi 994.
 insecta, use Entomophthorales, culture 1805.
 insecta, use Hyphomycetes, culture 1806.
 insecta, use Hyphomycetes, virulence 1004.
 insecta, use toxins, *Bacillus thuringiensis* 5564.
Kuehneobia ureidinis leaf rust, Rubus, weed control, USA, Hawaii 9410.
Lactobacillus use, *Brochothrix thermosphacta* food contamination, meat products vacuum packaging 4835.
Lagenidium giganteum, survival, overwintering, paddy fields, infectivity, *Culicidae* 6615.
 larvicides, factors affecting, *Bacillus thuringiensis*, *Culex quinquefasciatus*, *Aedes aegypti*, *Anopheles albimanus*, *Anopheles quadrimaculatus* 8380.
 Lepidoptera decemlineata, pathogenicity, *Beauveria bassiana* conidia foliar application, *Solanum tuberosum* leaves, bioassays 7482.
Metarrhizium anisopliae, *Neurospora*, *Streptomyces eximius* 1966.
 microorganisms, pathogenicity, animals 4711.
 microorganisms, pathogens, *Mollusca* 1011.
 microorganisms, safety 3742.
 myxoma virus, pest control, *Oryctolagus cuniculus* 6623.
Nasutitermes exitiosus, pathogens, pest control, *Metarrhizium anisopliae* 7502.
Nectria haematococca, plant diseases, *Fusarium oxysporum* 3719.
Nomuraea rileyi, pathogens, *Lepidoptera* 1010.
 nuclear polyhedrosis virus + deltamethrin, synergism, *Mamestra brassicae*, *Spodoptera littoralis* 9208.
 nuclear polyhedrosis virus, adjuvants, efficacy, *Heliothis zea* 6595.
 nuclear polyhedrosis virus, *Adoxophyes orana* larvae 8358.
 nuclear polyhedrosis virus, *Bacillus thuringiensis*, granulosis virus, *Tropaeolum* n., *Pisum rapae*, *Brassica oleracea*, crop fields 6596.
 nuclear polyhedrosis virus, granulosis virus, insecta, control programs 9212.
 nuclear polyhedrosis virus, *Heliothis zea* 996.
 nuclear polyhedrosis virus, *Oporophthera brumata* 9213.
 nuclear polyhedrosis virus, *Orygia pseudotsugata*, *Pseudotsuga menziesii* 8352.
 nuclear polyhedrosis virus, pest control, *Lymantia dispar* 7476.
 nuclear polyhedrosis virus, *Bacillus thuringiensis*, *Culicidae* 296.
 pathogenicity, environmental effects, *Bacillus thuringiensis*, *Culex pipiens*, *Aedes aegypti* 295.
 pathogens, *Bacillus sphaericus* mortality, *Bacillus thuringiensis*, *Culicidae* 2850.
 pathogens, bioassays, *Culicimorys clavosporus*, *Simulium pictipes*, *Simulium vittatum* 7483.
 pathogens, comparison, isolates virulence, *Bacillus thuringiensis*, *Choristoneura fumiferana* 8379.
 pathogens, fungi, *Culicidae* 1017.
 pathogens, heat inactivation, calciviruses, *Arnyelios transtella* 5549.
 pathogens, *Lagenidium giganteum*, toxicity, insecticides, herbicides, fungicides, *Culicidae* 6060.
 pathogens, *Metarrhizium anisopliae*, eggs, larvae, *Otiorynchus sulcatus* 986.
 pathogens, nuclear polyhedrosis virus, sprays, adjuvants, *Heliothis zea* 5547.
 pathogens, pest control, foliar applications, insecta 993.
 pathogens, safety regulations 1025.
 pest control, *Bacillus thuringiensis*, *Culicidae* 297.
 pest control, *Bacillus thuringiensis*, pathogens, Insecta 999.
 pest control, baculovirus, *Lepidoptera* 998.
 pest control, baculovirus, persistence, *Culicidae* 1005.
 pest control, Entomophthorales, Insecta 1000.
 pest control, Entomophthorales, Insecta 1001.
 pest control, Hyphomycetes, Insecta 1003.
 pest control, *Lagenidium giganteum*, *Culicidae* 1014.
 pest control, mortality, *Heliothis virescens* 7224.
 pest control, nuclear polyhedrosis virus, U.V. radiation protection virulence, *Lymantia dispar* 7476.
 pest control, pathogens, baits, Insecta 990.
 pest control, pathogens, conferences 1819.
 pest control, pathogens, foliar applications, crop fields, Insecta 992.
 pest control, pathogens, foliar applications, methodology, crop fields, *Arthropoda* 991.
 pest control, pathogens, fungi, Insecta 995.
 pest control, pathogens, Insecta 988.
 pest control, viruses, dispersal, *Arthropoda* 989.
 pest control, viruses, *Nematocera* 1016.
 plant diseases, conferences 1818.
 plant diseases, microorganisms, books 4550.
 plant diseases, phytophthora, reviews 3147.
 plant diseases, soil-borne diseases 9472.
Pythium rot, association, *Pseudomonas antagonism*, *Trichoderma hamatum*, *Pisum sativum* seeds 5820.
Pythium ultimum, role, *Gliocladium vires*, *giovini* 5831.
Rhizoctonia bataticola root rot, *Cicer arietinum*, *Streptomyces*, *Stachybotrys atra* 7455.
 scab, *Venturia inaequalis*, screening, antagonists, *Chaetomium globosum* 3740.
 soil-borne diseases, *Verticillium dahliae*, *Fusarium oxysporum* f.sp.vasinfecum, *Gossypium hirsutum* 7789.
 sprays, *Bacillus thuringiensis*, *Choristoneura fumiferana* 7488.
 sprays, *Bacillus thuringiensis*, *Choristoneura fumiferana* 8350.
Streptomyces longisporus antagonism, *Helminthosporium oryzae* brown spot, *Oryza sativa*, *Alternaria solani* early blight, *Solanum tuberosum* 4105.
Tarameyces fleus, *Verticillium dahliae* wilt, *Solanum melongena* 1390.
Trichoderma viride, Dutch elm disease, *Ulmus* 6613.
 vectors, insecta, research programs 1029.
 vectors, microorganisms, Insecta 6622.
Verticillium lecanii, *Trialeurodes vaporariorum*, pest control 126.
 viruses, bacteria, fungi, Insecta 4722.
 weed control, *Alternaria cassiae*, seedling blight, *Cassia obtusifolia*, *Cassia occidentalis*, *Crotalaria spectabilis* 1286.
 weed control, *Colletotrichum gloeosporioides*, *Hakea senecio*, field trials 9408.
 weed control, *Colletotrichum malvarum*, *Sida spinosa* 1285.
 weed control, pathogens, books 8183.
 weed control, plant diseases, pathogens, developing countries 7472.
 white rot, *Allium cepa*, seed treatments, *Bacillus subtilis* fungicides 4103.
 wilt, *Pseudomonas solanacearum*, disease resistance, *Solanum tuberosum* 5833.
Xanthophora radicans pathogens, *Theroaphis trifolii* maculata 1033.

biological oxygen demand,

microorganisms, reactors wastewater treatment 5310.
 pollution monitoring, sewage effluents, algae 2614.

Biological properties,

antibiotic C-19393 E5 1667.
 enterotoxins, peptides, synthesis, *Escherichia coli* 2086.
 lynchchromin, lagosin, cogomycin, comparison, *Streptomyces* 2591.
Gibberella zeae, pathogenicity, *Zea mays* 1167.
 β -D-glucosidase, *Talaromyces emersonii* 31.
 maize rayado fino disease virus isolates 364.
Mucor pusillus proteinase 35.
 Pisces pathogens, *Vibrio*, *Pasteurella* 1785.
 saphenomycin, biosynthesis, *Streptomyces canarius* 1658.
Streptococcus pyogenes, exotoxins, amphoteric, effects on 2084.
Streptomyces peptides, immunostimulants 921.
 viruses spot, Gramineae, symptoms, vectors 1163.

Bluminescence,

assays, bacteria adenosinetriphosphatase, blood culture, use, bacteremia diagnosis 8125.
 kinetics, mechanisms, alkaline monoxygenase (FMN-linked), *Vibrio harveyi* 7390.
 levels, use, measuring techniques, sewage sludge ATP levels 7194.
 measuring techniques, bacteria cell adhesion, polystyrene substrates 4489.
 use, clinical microbiology, detection, bacteria, methodology 4478.

Biomass,

Aspergillus terreus, quantitation, association cellulose surfaces 2718.
Azospirillum brasilense, role, nitrogen nutrition, *Triticum aestivum*, *Zea mays* 7011.
 bacteria, activity, bioreactors, factor affecting 9104.
 bacteria, oleophila, production, alkanes nutrient sources, fermenters 7535.
Candida pseudotropicalis production, whey utilization 8307.
 chemical composition, *Saccharomyces storage*, wine fermentation residues 7512.
 concentration, *Saccharomyces cerevisiae* ethanol fermentation 7528.
 conversion, ethanol production, sugars fermentation, conferences 10010.
 conversion, feeds 7603.
 conversion, hemicellulose hydrolysis, percolation reactors, mathematical models 9194.
 conversion, synthetic fuels 5137.
 determination, bacteria, dry matter water uptake analysis 8129.
 fungi, penicillin fermentation, measuring techniques, probes 9085.
 fungi, spatial distribution, seasonal variations, *Pinus*, forests 515.
 hydrolysis, sugars production, enzymatic activity, yeasts 5535.
 measurement, microorganisms, relationship, carbon dioxide release, soil 1969.
 microorganisms, determination methodology, leaf litter 3513.
 microorganisms, ground water sediments, detection methodology, association, glycerol assays 4466.
 microorganisms, soil removal, pasture restoration effects on 3182.
 microorganisms, straw composts, association, *Agaricus bisporus* nutrition 2923.
 microorganisms, tillage, effects on, soil properties, carbon, nitrogen, mineralization 2359.
 microorganisms, wastes, quantification, radium adsorption 9828.
 monitoring, *Acinetobacter calcoaceticus*, cell adhesion, methodology, hexadecane, production 5142.
 mycorrhizas, association, roots, *Vicia faba* 553.
 nutrient cycles, stands, mycorrhizas, fungi, *Pseudotsuga menziesii*, USA, Oregon 6905.
 oxidation, microorganisms, measuring techniques, use, potassium dichromate 6287.
Penicillium digitatum mycelia, use, solution uranium removal 9628.
Penicillium janthinellum, production, fermentation, straw, *Oryza sativa* 7564.
Penicillium, microbiology, uranium, phosphate 8969.
 phosphate, soil microorganisms, measuring techniques 567.
 production, *Candida brassicae* continuous culture, computer applications 8167.
 production, *Candida oleophila*, n-alkanes utilization 5993.
 production, sedimentation, fermenters, reviews 8083.
 production, utilization, conferences, books 10009.
 productivity, yeast batch culture fermenters, oxygen application 5442.
Propionibacterium continuous culture, pH effects on 7312.
 soil microorganisms, enzymatic activity, crop fields, agricultural practices effects on 5980.
 soil microorganisms, measuring techniques 8666.
 soil microorganisms, phosphorus, measuring techniques 572.
 soil microorganisms, soil, measuring techniques 6339.
Sporotrichum pulverulentum, production, pigs wastes 9102.
 tundra, mycorrhizas, sub-alpine environments 5883.
 yield, *Candida utilis* continuous culture, ethanol metabolism, oxygen effects on 7509.

Bioreactors,
 activated sludge treatment, chemicals wastes 9804.
 aeration, *Hansenula polymorpha*, *Escherichia coli*, media (culture), reviews 8084.
 anaerobic conditions, organic compounds + methanol loading, degradation association 8940.
 bacteria biomass activity, factor affecting 9104.
 bagasse hydrolysis, cellulase, *Trichoderma reesei* 9152.
 cellulase pastes conversion, *Trichoderma viride* enzymatic activity 9172.
 digestion (anaerobic), effluents recirculation effects on 9807.
 digestion (anaerobic), wastewater treatment 8960.
 +ejector, hydrodynamics, *Candida utilis* growth 9987.
 ethanol production, use, resins immobilized cells, *Zymomonas mobilis* 9250.
 ethylene oxide production *Mycobacterium* immobilized cells 3262.
 growth conditions, *Escherichia coli* cultivation 9871.
 growth conditions, *Escherichia coli* cultivation 9973.
 immobilized enzymes, sucrose hydrolysis 9265.
 microorganisms binding kaolinite, methodology 5357.
 microorganisms, books 5446.
 microorganisms polysaccharides activity, mathematical models 1064.
 nitrifying bacteria films, fluidity, porosity 9010.
Saccharomyces cerevisiae, ethanol, production 7513.
 technology 8086.
 waste treatment, digestion (anaerobic), methodology, characterization 8928.
 waste treatment, fisheries 8930.
 waste treatment, overload, effects on 8929.
 yeasts, immobilized enzymes, alcohol dehydrogenase activity 7361.
Zymomonas mobilis, ethanol production 6635.

Biotechnology,
 use, oxidoreductase enzymes, reviews 9145.

Biotin,
 binding sites, acetyl-CoA carboxylase, peptide synthesis, interaction, magnesium, N.M.R., *Escherichia coli* 4632.
 biosynthesis, *Escherichia coli*, association sulfur 2843.
 biosynthesis, optimization, *Rhizopus delemar* 6626.

- Biotin, (continued)**
 biosynthesis, *Streptomyces levoris*, yeasts stimulants effects on 8021.
 Claviceps, effects on ergot alkaloids production 4914.
 effects on citric acid production, *Aspergillus niger* 5488.
 overproduction, *Bacillus sphaericus* 8381.
 production, *Rhizopus delemar* 1372.
 RNA labelling, use phase T4 polynucleotide synthetase (ATP) 9833.
 stimulation, peptidoglycans biosynthesis, *Brevibacterium divaricatum* 1957.
- Biotinylating**
Citrobacter koseri 7903.
Enterobacter cloacae 3592.
Erwinia chrysanthemi, pathogenicity, *Zea mays*, ornamental plants 4927.
 Haemophilus influenzae, relationship, virulence, antibiotic resistance, ampicillin, in vitro 7048.
Staphylococcus epidermidis, API test 9910.
Vibrio cholerae, growth, food contamination 3835.
- Biphenyl**
 oil, bacteria biodegradation, marine environment 8719.
 oxidation, *Cunninghamella elegans*, association, glucuronide, sulfate biosynthesis 2391.
- Bipolaris maydis**
 infection, *Zea mays*, disease resistance, comparison, *Colletotrichum graminicola* infection 4069.
- Bipolaris oryzae**
 brown spot, mancozeb, resistance, *Zizania aquatica* 6023.
 leafspot, hypersensitive response, lesions, *Oryza sativa* 5039.
 resistance, fenapanil 9633.
- Bipolaris setariae**
 infection, *Chrysoidocarpus lutescens*, insecticides soaps, foliar applications 9486.
 leafspot, *Chrysoidocarpus lutescens*, etiology 1269.
- Bipolaris sorokiniana**
 brown spot, mancozeb, resistance, *Zizania aquatica* 6023.
 conidia, identification, soil isolates 7806.
 root rot, *Triticum aestivum*, *Hordeum vulgare* 4959.
 root rot, *Triticum aestivum*, USA, Colorado, USA, Wyoming 6776.
- Biquaternary ammonium compounds**
 antimicrobial activity 703.
- Bis-(3-hydroxy-2-oxocycloheptatrien-(3,5,7)-yl)-sulfide**
Phaeoacremonia ceapae, isolation, antibacterial activity 88.
- 1,4-Bis[3-(n-hexylcarbamylguanidine)propyl]piperazine dimethanesulfonate**
 antibacterial activity, gingivitis, man 813.
- Bispyridines**
 structure-function relationship, antimicrobial activity, *Streptococcus*, Actinomycetes, dental plaque 5222.
- Bitter melon**
 use, ornamental plants disease control 5056.
- Bis(tributyltin)oxide**
 bacteriostatic, bactericidal activity, *Legionella pneumophila* 3332.
- Blister rot**
Glomerella cingulata, pathogenicity, *Malus pumila* 9377.
- Blittersma**
 fruit juices, bacteria spoilage 7590.
- Bjerkandera adusta**
 decay, association frost damage, *Quercus rubra*, *Quercus robur* 6921.
- Black leg**
Erwinia carotovora, interaction, wilt, *Fusarium*, *Verticillium dahliae*, effects on *Solanum tuberosum* 1251.
Solanum tuberosum, characterization 2153.
- Black line**
Phaseolus vulgaris, association, cherry leaf roll virus, cytopathology 339.
- Black pod**
Phytophthora, *Theobroma cacao*, etiology 396.
Thielaviopsis basicola, disease resistance, plant breeding, *Arachis hypogaea* 9465.
- Black root**
Thielaviopsis basicola, histology, *Ilex crenata* 4994.
- Black rot**
Citricaria esculenta, *Ceratocystis fimbriata* spores agglutination factors, isolation, characterization 4983.
Cylindrocladum crotalariae, soil inoculum, spatial distribution, epidemiology, *Arachis hypogaea* 1123.
 host specificity, *Ceratocystis fimbriata*, spores, agglutination, extracts; *Ipomoea batatas*, roots 3095.
Strasseria oxyocoi, *Ceanothus lunata*, pathology, *Vaccinium macrocarpon* 4052.
Strasseria oxyocoi, pathology, *Vaccinium macrocarpon* 4050.
Xanthomonas campestris pv. *campestris*, media (isolation), soil 6309.
- Black scurf**
Rhizoctonia solani, disease control, iprodione, benodanil, thiabendazole, *Solanum tuberosum* 5055.
- Black shank**
Nicotiana tabacum, disease control, fungicides + nematocides 4125.
Phytophthora parasitica, disease resistance, *Nicotiana*, genetic analysis 1340.
Phytophthora parasitica var. *nicotianae*, temperature, rainfall, effects on, pathogenesis, *Nicotiana tabacum* 3050.
- Black spot**
 fungicides disease control, *Diospyros kaki* 8628.
- Black stain**
Verticillidactyla, pathogenicity, *Pinus contorta* 9519.
Verticillidactyla wagneri, *Pseudotsuga menziesii* roots 9526.
- Black stem**
Dichotomophthora portulacae, *Portulaca oleracea* 9427.
Phoma medicaginis var. *medicaginis*, *Medicago sativa*, USA, Wyoming 9330.
- Black tip**
 rice, association, *Alternaria*, *Culvarula*, toxicity 3863.
- Blackeye cowpea mosaic virus**
 disease resistance, inheritance, *Phaseolus vulgaris* 4088.
- Blackstonia perfoliata**
 mycorrhizas, nutrient status, seasonal variations 1490.
- Blacktea tripora**
 fermentation, β -carotene, β -D-glucosidase, biosynthesis, cellobiose media (culture) 104.
- Blast**
Oryza sativa, environmental conditions effects on pathogenesis 1169.
Oryza sativa, fungicides, *Pyruliana oryzae* 2274.
Pyruliana grisea, pathogenicity, *Lolium multiflorum* 1178.
- Blast, (continued)**
Pyruliana oryzae, cultural characteristics, relationship pathogenicity, *Oryza sativa* 5699.
Pyruliana oryzae, epidemiology, relationship, meteorology, *Oryza sativa* 1182.
Pyruliana oryzae, fungicides disease control, *Oryza sativa* 8630.
Pyruliana oryzae, fungicides resistance, measuring techniques, in vitro 7892.
Pyruliana oryzae, *Oryza sativa*, antifungal agents effects on pathogenesis 5627.
Pyruliana oryzae, *Oryza sativa* disease resistance, USA 5711.
- Blastoyses**
 self fluorescence, use, detection, tissues 8156.
- Blastomycosis dermatitidis**
 blastomycosis, immunodiagnosis, antiglobulin hemagglutination test 5434.
 cell culture, formalin antifungal activity 8793.
 identification, immunodiffusion 4543.
 viability detection, methodology comparison 9986.
- Blastomycosis**
 immunodiagnosis, antiglobulin hemagglutination test 5434.
- Bleaching**
 powder, antibacterial activity, *Xanthomonas phaseoli*, leafspot, *Vigna radiata* 2289.
- Bleomycin**
 sensitivity, use, identification, *Mycobacterium*, strains, *Rhodococcus*, *Nocardia* 671.
 synthesis, methodology 4399.
- Bletilia striata**
 benzenyls, dihydrophenanthrenes, antibacterial activity 7079.
- Blight**
Allium cepa, *Botrytis squamosa* conidia release, weather relationship 5771.
Alternaria alternata, *Pisum sativum* 1136.
Alternaria dausi, disease control, foliar applications, fungicides, spraying equipment, *Daucus carota* 9484.
Alternaria helianthi, inoculum production, *Helianthus annuus* 5746.
Alternaria panax, *Brassica actinophylla*, *Schefflera arboricola*, benomyl effects 18882.
Arachis hypogaea leaves volatiles *Sclerotinia minor* sclerotia germination 4937.
Arachis hypogaea, *Sclerotinia minor* sclerotia quantitation 5680.
Ascochyta rabiei, *Cicer arietinum*, disease resistance, inheritance 6867.
Ascochyta rabiei, *Cicer arietinum*, reviews 1142.
 bacteria, *Manihot esculenta*, symptoms, etiology 4022.
 bacteria, *Oncometopia nigricans*, disease transmission, *Citrus* 1204.
 bacteria, *Phaseolus vulgaris*, disease control 9462.
Basidiomycetes, *Poa pratensis*, *Poa annua* 1172.
Beniowskia sphaeovidea, pathology, *Setaria geniculata* 1184.
 blocking, xylem, *Citrus sinensis* 8565.
Choanephora cucurbitarum, pathogenicity, *Capsicum annuum* 4004.
Cryphonectria parasitica, virulence, effects on, dieback, *Castanea dentata* 8655.
Endothia parasitica, disease control, virulence, *Castanea dentata*, reviews 4165.
Endothia parasitica, virulence, *Castanea dentata*, Greece 6916.
Endothia parasitica, virulence, disease control, *Castanea dentata* 6922.
Endothia parasitica, virulence, disease resistance, *Castanea dentata* 8623.
Fusarium graminearum, disease resistance, seedlings, *Zea mays* 1361.
Glycine max 1132.
Manihot esculenta, disease resistance, *Xanthomonas campestris* pv. *manihotis* infection 2320.
Nectria cinnabarna, disease control, *Malus pumila*, benomyl, captafol 4120.
Oryza sativa, *Xanthomonas campestris* pv. *oryzae*, virulence 352.
Phaeodum infestans, *Pinus sylvestris* survival, reforestation 4164.
Phaeopsis vaccinii, pathology, *Vaccinium corymbosum* 1271.
Phytophthora infestans, effects on, *Solanum tuberosum*, yield 6822.
Phytophthora infestans, epidemiology, *Solanum tuberosum* 6821.
Phytophthora infestans, inoculum potential, epidemiology, *Solanum tuberosum* 42.
Phytophthora infestans, *Solanum tuberosum*, disease control, metalaxyl 9494.
Polyscias fruticosa, foliar diseases, *Alternaria panax* 3090.
Pseudomonas, *Glycine max*, symptoms, relationship, carotene biosynthesis 299.
Pseudomonas glycinea, identification, biochemical characteristics, *Glycine max* 2991.
Pseudomonas syringae pv. *psii*, incidence, *Pisum sativum*, Israel 9335.
Pseudomonas tolaasii, attachment, *Agaricus bisporus*, scanning electron microscopy 3051.
Pythium, pathology, *Gramineae*, turfgrass 5714.
Pythium, *Phaseolus vulgaris*, disease control, metalaxyl 9493.
Pythium ultimum, *Agrostis palustris*, predictions, climatic conditions 9362.
Rhizoctonia, *Lespedeza cuneata*, disease resistance, plant breeding 6866.
Rhizoctonia, *Lespedeza cuneata*, pathogenicity, seeds yield association 6745.
Rhizoctonia solani isolates, pathogenicity, *Phaseolus vulgaris* 1134.
Sclerotinia minor, *Arachis hypogaea*, fungicides disease control 4100.
Sclerotinia minor, chlorothalonil, disease control, *Arachis hypogaea* 3151.
Sclerotinia minor, disease resistance, plant breeding, *Arachis hypogaea* 1342.
Sclerotium rolfsii, basidiomycetes, role, pathogenesis, *Agrostis tenuis* 9339.
Sclerotium rolfsii, disease control, fungicides, salts, *Trichoderma*, *Poa* 1402.
Sclerotium rolfsii, fumigants disease control, *Malus pumila* 492.
Solanum tuberosum, detection, aerial photography, I.R. radiation 1252.
Vigna unguiculata, *Xanthomonas campestris*, comparison *Phaseolus vulgaris*, pathogenesis 340.
Xanthomonas campestris pv. *malvacearum*, *Gossypium hirsutum*, cotyledons, membrane potential, relationship, ATP 3055.
Xanthomonas campestris pv. *malvacearum*, hypersensitive response, *Gossypium hirsutum* 3129.
Xanthomonas campestris pv. *oryzae*, disease resistance, genes, genetic analysis, *Oryza sativa* 9459.
Xanthomonas campestris pv. *oryzae*, *Oryza sativa* disease resistance inheritance 9364.
Xanthomonas campestris pv. *oryzae*, *Oryza sativa*, incidence, Niger 9355.
Xanthomonas campestris pv. *oryzae*, virulence, *Oryza sativa* 1195.
Xanthomonas campestris pv. *phaseoli*, *Phaseolus vulgaris* disease resistance, tropical environments 5022.
Xanthomonas malvacearum, disease resistance, genetic analysis, *Gossypium hirsutum* 2254.
Xanthomonas manihoti, *Manihot esculenta*, age effects on incidence, development 4016.
- Blighter rust**
Cronartium coleosporioides, relationship habitat, *Pinus contorta*, surveys, USA, Idaho 5862.
Cronartium, *Pinus*, *Rodentia*, feeding damage 2318.
Cronartium ribicola, disease control, pruning, *Pinus monticola* 1457.
Cronartium ribicola, disease control, pruning, *Pinus strobus* 1466.

later rust, (continued)

- Cronartium ribicola*, genetic variance, pathogenicity, *Pinus monticola* 1452.
Pinus contorta subsp. *latifolia*, effects on production, cones, seeds 4169.
Pinus monticola, disease resistance, USA 8618.
Sulilus luteus, infection monitoring, chitin, mannans, levels, *Pinus sylvestris* 3170.
- pod,**
 anaerobic bacteria, bacteremia, isolation methodology, centrifugation-filtration 9946.
 detection, tetracyclines 4393.
- pod culture,**
 antimicrobial agents adsorption, bacteremia, diagnosis, man 836.
 atmospheric composition, effects on species composition, bacteria, yeasts 9012.
 Bactec test, bacteria isolation 9950.
 bacteremia, detection, Bactec test 9899.
 bacteria, centrifugation, isolation methodology 9947.
 bacteria isolation, subculture, aerobic conditions 9924.
 Capnocytophaga, media (selective), agar 9906.
 clinical isolates, yeasts, bacteria, sucrose effects on detection 9955.
 gram-negative bacteria, biochemical characteristics, identification, API test 839.
 Legionella pneumoniae isolation methodology 9912.
 media (culture), sucrose effects on bacteria isolation 9930.
 media (isolation), cerebrospinal fluid 6331.
 methodology, anaerobic bacteria isolation, children 2683.
 methodology, bacteremia diagnosis, man 860.
 sodium chloride, phosphate buffers, Legionella pneumoniae 851.
 Streptococcus, identification, latex agglutination 5412.
- pod donors,**
 tetanus toxins antibodies, screening, latex agglutination 3621.
 TPHA test detection Treponema pallidum, man 5394.
- pod group P1,**
 hemagglutination, identification Escherichia coli pili receptors 5402.
- osom blight,**
 Monilinia fructicola, benomyl resistance, disease control, Prunus persica 5835.
- otch,**
 Bacillus megaterium pv. cereales, Triticum aestivum 1152.
 Phoma arachidicola, interspecific relationships, Cercospora arachidicola
 leafspot, yield, Arachis hypogaea 2996.
 Pseudomonas tolaasi, symptoms, pathogenesis, experimental infection 1293.
- otc, mold,**
 Nicotiana, disease resistance, plant breeding 1339.
 Penicillium expansum, benomyl, disease control, association, stem rot, Alternaria
 alternata, Pyrus communis 9373.
 Penicillium italicum, thiabendazole resistance, oranges 6009.
 Peronospora effusa, disease resistance, genetic analysis, Spinacia oleracea 1337.
 Peronospora hycosami, metalaxyl resistance, disease control, Nicotiana tabacum
 5063.
 Peronospora hycosami, spores, metalaxyl, Nicotiana tabacum 2287.
 Peronospora tabacina, spores release, disease spread, wind, Nicotiana tabacum
 4995.
 Spinacea oleracea disease control, metalaxyl+chlorothalonil treatment 5064.
- ue stain,**
 Ceratocystis minor, Dendroctonus frontalis, vectors, Pinus 3168.
- uclerles,**
 fungi infection, post-harvest decay, disease control, carbon dioxide storage
 3106.
 post-harvest decay, Alternaria, Botrytis, moisture effects on 5032.
- uensomycin,**
 stereochemistry 1622.
- uetongue virus,**
 antigens, purification 5478.
- udy fluids,**
 antibiotics assays 9724.
 man, antibacterial activity, cefotetan 4377.
 man, ceftazidime determination, high-pressure liquid chromatography methodology
 864.
- uehmeria cylindrica,**
 extracts, antifungal activity, Candida albicans 4303.
- ugs,**
 nitrogen fixation, denitrification 3213.
 particle size, mineralization, nutrient levels, peat, nitrogen, soil
 microorganisms 8697.
- uletale,**
 low molecular weight metabolites, taxonomic significance, evolution 5461.
- uletus edulis,**
 extracts, chelating agents, iron, soil 9558.
 growth, Aspergillus, aflatoxins production 8501.
- ulvia,**
 mycoplasma-like organisms infection, Oxalis tuberosa, incidence 433.
- ulmyx mori,**
 baculovirus pathogenicity, nontarget organisms, biological control 9207.
 inhibitors, proteinase activity, fungi 2751.
 arvae, midgut cells, Bacillus thuringiensis toxins pathogenesis 3738.
- une,**
 meat processing, contamination, microorganisms 4783.
- ue resorption,**
 factors, Actinomyces viscosus, relationship, antigens, characterization 3711.
- uella,**
 antibacterial activity, bacteria 6048.
- ngkreik acid,**
 Pseudomonas coovenenans, inhibition bromelain, papain, ficin 2079.
- oue,**
 antibiotics, structure, mechanisms 7277.
 antimicrobial agents, drug sensitivity testing, drug resistance 10001.
 applied microbiology 5451.
 bacteria, viruses, fungi, identification, diagnosis, methodology, automated
 methods 5449.
 biodegradation, fungi, bacteria, conferences 10004.
 biogeochemistry, conferences 7279.
 biological control, insecta pathogenicity plants, viruses, fungi 9093.
 biological control, plant diseases, microorganisms 4550.
 biomass production, utilization, conferences 10009.
 bioreactors, microorganisms 5446.

Books, (continued)

- carbohydrate metabolism enzymes, purification, characterization, kinetics 5445.
 conferences, antibacterial agents, antiviral agents, chemotherapy, man, activity,
 in vitro 6364
 conferences, Bacterioides, decomposition, ecology 8187.
 conferences, viruses, plant diseases 7278.
 drugs, antibiotics, antimicrobial activity, treatment, infectious diseases 1617.
 enzymes, bacteria, yeasts, purification, characterization 7275.
 enzymes, fermentation, biotechnology 8179.
 ethanol production, bacteria 5447.
 fermented food 907.
 food contamination, sanitation, food industry 4549.
 food poisoning, man 10002.
 food poisoning microorganisms, isolation, identification 8186.
 fouling organisms, bacteria, heat transfer, equipment 5444.
 fungi, secondary metabolism, metabolites 3637.
 genetic engineering, microorganisms, fermentation 7276.
 industrial microbiology 4548.
 β -lactam antibiotics 9997.
 β -lactam antibiotics, biological properties, chemical properties 8182.
 β -lactam antibiotics characterization 8176.
 lipid metabolism, bacteria, fungi, enzymes 9090.
 methanogenic bacteria, methylotrophic bacteria, metabolism, sewage treatment,
 technology 5450.
 methylotrophic bacteria, biochemical characteristics 906.
 microbiology laboratories methodology 9091.
 microorganisms, antibiotics biosynthesis, screening 2727.
 microorganisms, genetic engineering, products biosynthesis 8175.
 microorganisms, microbiology 8184.
 microorganisms, secondary metabolism, antibiotics, extracellular enzymes 3636.
 microorganisms, use, agricultural practices 8174.
 nitrogen content, soil, measuring techniques, conferences 9098.
 nitrogen fixation 8180.
 nitrogen fixation, Leguminosae 8177.
 nitrogen fixation, Rhizobium 9996.
 plant diseases 9095.
 plant diseases, epidemiology, host-pathogen interactions, genetic factors,
 disease resistance 9996.
 plants tumors, molecules structure 8173.
 production, Candida, single-cell protein, ethanol, use, wastes 10000.
 scanning electron microscopy, fungi, bacteria 903.
 sewage sludge, effects on, soil properties, conferences 8188.
 skin disinfection, antimicrobial agents, man 6359.
 soil microorganisms, biodegradation, industrial wastes, land disposal 6360.
 soil microorganisms, ecology 3635.
 soil, nutrient cycles, decomposition, mathematical models 5448.
 soil, suppression, plant diseases, disease control 904.
 tropical environment, soil microorganisms, effects on, plants, yield 8181.
 viruses, plant diseases 9094.
 viruses, plant diseases, Spermatophyta, pathology 8178.
 wastewater treatment, conferences 9097.
 wastewater treatment, nitrogen removal, nitrogen, removal, wastewater treatment,
 books 9995.
 wastewater treatment, oxidation 9092.
 water supplies, microbial pollution, water-borne diseases, epidemics, indicator
 species 9999.
 weed control, biological control, microorganisms, pathogens 8183.
 wine production, fermentation 905.
- Bordetella,**
 chlorpromazine, bacteriostasis, antibacterial activity 3323.
- Bordetella bronchiseptica,**
 antibodies, detection, enzyme-linked immunosorbent assay, methodology 3611.
 vaccines preparation, immunogenicity, immunity, dogs 785.
- Bordetella pertussis,**
 adenylate cyclase, calmodulin activation 7349.
 antibodies, radioimmunoassay detection, cattle 1789.
 colonial characteristics, morphology, biochemical characteristics, antibiotics
 effects on 1596.
 drug sensitivity testing 7133.
 endotoxins.
 2-amino-6-O-(2-amino-2-deoxy- β -D-glucopyranosyl)-2-deoxy-D-glucose,
 hydrophobicity regions 7632.
 endotoxins, 3-hydroxytetradecanoyl substitution 6704.
 hemagglutinins, antibodies, enzyme-linked immunosorbent assay 889.
 hemagglutinins, purification, characterization, use, enzyme-linked immunosorbent
 assay 886.
 media (selective) 9900.
 pertussis toxins biosynthesis, heptakis(2,6-O-dimethyl)- β -cyclodextrin effects
 on 8523.
 toxins binding haptoglobulin, enzyme-linked immunosorbent assay 6720.
 toxins, reviews 7630.
 toxins subunit structure 302.
 ultrastructure, antibiotics effects on 1599.
 vaccines, stability, methodology 3450.
- Borelia reticulata,**
 mycorrhizas, association Adelles 1472.
- Boron,**
 role tobacco mosaic virus disease resistance, callus deposition, Nicotiana
 tabacum, Phaseolus vulgaris 1377.
- Botrychium,**
 vesicular-arbuscular mycorrhizas, morphology 3327.
- Botrydiplodia,**
 crown rot, Musa sapientum, pathogenicity 395.
- Botrydiplodia hypodermia,**
 infection, Ulmus pumila, virulence 2320.
- Botrydiplodia theobroma,**
 spores, vectors, Mus musculus domesticus, Periplaneta americana, Zonocerus
 vanguardus, yams, post-harvest decay 442.
- Botrydiplodia theobroma,**
 canker, Rosa, disease control, fungicides 1410.
 cellulolytic enzymes, production 7409.
 Dioscorea rotundata extracts antifungal activity 3339.
 fruit rot, Lagerania vulgaris, phenols levels 7718.
 life cycle, soft rot, Dioscorea 5791.
 post-harvest decay, etiology, Manihot esculenta 3102.
 rot, bananas, post-harvest decay, fungicides control 5804.

- Botryodiplodia theobromae**, (continued)
soft rot, citrus sinensis, association pectinolytic enzymes 3965.
stem rot, *Persea gratissima*, disease control, prochloraz 6633.
- Botryosphaeria**,
gummosis, pathology, *Prunus persica* 1217.
- Botryosphaeria clothidea**,
fruit rot symptom, *Prunus persica* 5735.
- Botryosphaeria corticia**,
stem canker, *Vaccinium corymbosum*, incidence, USA, New Jersey 6831.
- Botryosphaeria dothidea**,
association, mortality, *Pinus taeda*, *Pinus elliotii* var. *elliottii* 5870.
canker, orchards 1223.
gummosis, disease resistance, *Prunus persica* 2248.
gummosis, pathology, *Prunus persica* 1217.
gummosis, *Prunus persica*, epidemiology 1214.
white rot development, *Malus*, association, fructose content, pH 4975.
white rot, pathogenicity, *Malus pumila* 5739.
- canker, fumigants *Phytophthora cactorum*, *Malus pumila* 492.
- Botryosphaeria obtusa**,
fruit rot symptom, *Prunus persica* 5735.
gummosis, pathology, *Prunus persica* 1217.
- Botryosphaeria rhodina**,
fruit rot symptom, *Prunus persica* 5735.
gummosis, pathology, *Prunus persica* 1217.
- Botryosphaeria ribis**,
dieback, pathology, *Eucalyptus camaldulensis* 4159.
- Botryosphaeria vaccinii**,
pathogenicity, fruit rot, post-harvest decay, *Vaccinium macrocarpon* 9418.
- Botryosporium longibrachiatum**,
post-harvest decay, leaves, *Nicotiana tabacum* 9454.
- Botrytis**,
blueberries post-harvest decay, moisture effects on 5032.
- Botrytis allii**,
infection, *Allium cepa*, fluorescence association, factors affecting 8584.
infection, *Allium cepa* metabolism changes 9443.
infection, *Allium*, cytofluorometry 3975.
rot, disease resistance, *Allium cepa* 3986.
rot, soil-borne diseases, inoculum persistence, *Allium cepa* 2220.
- Botrytis cinerea**,
activators, effects on *Saccharomyces uvarum*, wine fermentation 3760.
antifungal activity, dithiocarbamates 3153.
antifungal activity, flavonoids 2283.
antifungal activity, N-benzylthiocarbamic acid derivatives 9678.
antifungal activity, 1-(3,5-dichlorophenyl)-2,5-pyrrolidinediones,
3-(3,5-dichlorophenyl)-2,4-oxazolidinediones, derivatives, structure activity
relationships 4300.
canker, *Rosa*, disease control, fungicides 1410.
cellulose decomposition, role infection, *Lycopersicon esculentum* 5794.
conidia, penetration structure, *Phaseolus vulgaris* 9332.
contamination, kiwifruit post-harvest decay, USA, California 5031.
dicarboximide fungicides resistance, New Zealand 7680.
dicarboximides resistance 7686.
drug resistance, methyl benzimidazol-2-yl carbamate 1527.
fruit rot, dicarboximides disease control, *Vitis vinifera* 8639.
fruit rot, *Fragaria* 3092.
grey mold, air composition, effects on, *Fragaria chiloensis* var. *ananassa* 5028.
grey mold, antifungal agents, disease control, *Rubus idaeus* 487.
grey mold, dicarboximides resistance, greenhouses 6884.
grey mold, disease control, *Cyclamen graecum*, iprodione, procydimone, vinclozolin
1424.
grey mold, *Plum sativum* 7663.
growth, spore germination, ammonia, volatiles, effects on 2349.
host-parasite interactions, grey mold, ultrastructure, role aromatic compounds
production, fruits, *Vitis vinifera* 9402.
infection, blueberries, post-harvest decay, disease control, carbon dioxide
storage 3106.
infection, defense mechanisms, leaves, lignin induction, *Triticum aestivum* 1368.
infection, *Lathyrus sativus* phytoalexins production association 6846.
infection, *Ribes nigrum* leaves, antifungal activity, sakuranetin 1332.
infection, *Rubus idaeus*, disease resistance 466.
laccase, factors affecting activity 8298.
Larix defoliation, association *Adelges* grazing 540.
leaf blotch, *Solanum tuberosum* 2213.
osmotic pressure, sensitivity, association, dicarboximide, resistance 6022.
pears post-harvest decay, antifungal activity, surfactants + chlorine 1323.
pectinase, fruit rot, *Lycopersicon esculentum* 5797.
post-harvest decay, grapes, sulfur dioxide fumigation, packaging, temperature
effects on 2905.
powdery mildew, propiconazole effects on, *Uncinula necator* 4102.
resistance, benomyl, captan 1531.
resistance, dicarboximides 9650.
rot, *Vitis vinifera* fruits, agricultural practices effects on pathogenicity, USA,
California 7685.
sclerotia, isolation methodology, soil 9568.
sclerophores, lesions, development, *Vicia faba* 3000.
spores, dispersal, incidence, *Phaseolus vulgaris* pod rot 5686.
terpenoids conversion, musts 5566.
- Botrytis fabae**,
conidia, survival, pathogenicity, *Vicia faba* 5677.
infection, *Vicia faba*, lesions spatial distribution, statistical analysis
methodology 2110.
- Botrytis squamosa**,
conidia release, *Allium cepa* blight, weather relationship 5771.
infection, *Allium cepa*, dew, temperature, effects on 8591.
iprodione resistance 1519.
- Bottle feeding**,
bottles, disinfection, bacteria, infants, man 800.
- Bottles**,
disinfection, bottle feeding, bacteria, infants, man 800.
mineral water, contamination, bacteria 2027.
pathogens, culture, methodology 5358.
rotation, cell culture, viruses 3532.
sterilization, microorganisms contamination source wineries 258.
washing, sterilization 4874.
- Botromycin A2**,
N.M.R., structure 9779.
- Bougainvillea spectabilis**,
host plants, *Stenella bougainvilleae* sp. nov. isolation, taxonomy 1254.
- Bouteloua gracilis**,
mycorrhizas, *Glomus fasciculatus*, nutrient status 1485.
- Bovine diarrhoea-mucosal disease virus**,
elimination, Vero cells cell culture 6301.
- Bovine leukemia virus**,
antibodies, detection, enzyme-linked immunosorbent assay, use, monoclonal
antibodies 4474.
nucleic acid-binding protein, amino acid sequence 7297.
- Bovine rhinotracheitis virus**,
susceptibility, α -interferon 6074.
- Bovine syncytial virus**,
replication, Vero cells cell culture, elimination bovine diarrhoea-mucosal disease
virus 6301.
- Box rot spoilage**,
prunes spoilage, fungi 4777.
- Brachionus plicatilis**,
+antibacterial agents, food sources, treatment infection, *Scophthalmus maximus*
larvae, aquaculture 7609.
population growth, association, *Saccharomyces cerevisiae* nutritive value,
nutrients supplements 7604.
- Brachycaudus helichrysi**,
potato virus Y transmission 4044.
- Bran**,
sterilization, I.R. radiation 5637.
- Branches**,
Arceuthobium abietinum parasitism, *Cytospora abietis* dieback, *Abies magnifica*
5863.
litter, size distribution, decomposition, fungi, forest floor 8647.
- Branhamella catarrhalis**,
 β -lactamase, isoelectric focusing 8292.
 β -lactamase production, activity, association, antibacterial activity,
 β -lactam antibiotics 9736.
 β -lactamase, production, characterization 8288.
nasopharynx isolates, antibacterial activity, cotrimoxazole, trimethoprim,
sulfamethoxazole 7066.
- Brassica actinophylla**,
Alternaria panax blight, benomyl effects on 6882.
Alternaria panax infection, insecticides soaps, foliar applications 9486.
leafspot, irrigation effects on pathogenesis 1274.
pathology, leafspot, *Alternaria* 3993.
- Brassica**,
beet western yellows virus infection 2176.
clubroot, *Plasmodiophora brassicae* 2212.
seed crops, incidence, *Alternaria*, *Leptosphaeria maculans*, British Isles, surveys
4042.
seedlings, *Pythium aphanidermatum* damping-off, new records, Singapore 1259.
seeds, surfaces, bacteria, factors affecting 4793.
susceptibility, tumour mosaic virus 2186.
Trifolium repens growth, mycorrhizas association, effects on 585.
- Brassica actinophylla**,
seedling blight, *Pythium splendens*, etiology, disease control, USA, Hawaii 4996.
- Brassica campestris**,
clubroot, role zoospores, *Plasmodiophora brassicae* 4996.
crop fields, fungal flora, seasonal variations, community composition 9546.
fungicides effects on leaf surface fungal flora 3146.
pathogenesis, *Aspergillus amstelodami*, *Penicillium verrucosum* var. *cyclopium*,
Verticillium lecanii, fluorescence, microscopy 2188.
- Brassica chinensis**,
soil moisture, effects on, *Plasmodiophora brassicae*, infection 2216.
- Brassica juncea**,
phospholipase A2, effects on pathogenesis, *Macrophomina phaseolina* infection
4005.
white rust resistance, phenols, sugars concentration 5769.
- Brassica napus**,
clubroot, role, 3-indolylmethylglucosinolate conversion 5761.
crop residues, chemicals treatment, *Leptosphaeria maculans* reproduction stages
suppression 463.
disease resistance, downy mildew, *Peronospora parasitica* 4056.
disease resistance, downy mildew, *Peronospora parasitica* 8609.
haploidy, heredity, disease resistance, *Phoma lingam* 450.
Leptosphaeria maculans latent infection 4041.
mixtures, effects on pathogenicity, powdery mildew, *Erysiphe polygoni* 4043.
fungicides surveys, Canada 7692.
Sclerotinia sclerotiorum infection, fungicides, disease control, spore traps
8634.
seed crops, incidence, *Alternaria*, *Leptosphaeria maculans*, British Isles, surveys
4042.
stem rot, *Phoma lingam*, disease control, agricultural practices 495.
- Brassica oleracea**,
fungicides, disease control, leafspot, *Pyrenopeziza brassicae* 2276.
- Brassica oleracea**,
clubroot, fungi, disease control, transplantation 4073.
clubroot, *Plasmodiophora brassicae*, disease control, foliar applications,
herbicides 8632.
disease resistance breeding, *Plasmodiophora brassicae* clubroot 9477.
disease resistance, downy mildew, *Peronospora parasitica* 4056.
seed crops, incidence, *Alternaria*, *Leptosphaeria maculans*, British Isles, surveys
4042.
seeds, *Alternaria brassicicola* infection, epidemiology 1229.
seeds, leafspot, disease control, iprodione 508.
stunt, methyl bromide fumigation induction, endomycorrhizas role growth 5913.
- Brassica oleracea var. acephala**,
cytology, immunodiagnostics, cauliflower mosaic virus, tumip mosaic virus 4983.
- Brassica oleracea var. botrytis**,
evolution, disease resistance, *Plasmodiophora brassicae* 6861.
- Brassica oleracea var. capitata**,
leafspot, *Alternaria brassicicola*, incidence, pathogenicity, Brazil 6818.
- Brassica pekinesis**,
downy mildew, *Peronospora parasitica*, fungicides disease control 8631.
- Brassica rapa**,
disease resistance breeding, *Plasmodiophora brassicae* clubroot 9477.
plant diseases, *Spiroplasma citri*, disease transmission, *Macrosteles fascifrons*

Brassica rapae, (continued)

- 6803.
- brasil.**
Brassica oleracea var capitata, leafspot, *Alternaria brassicicola*, incidence, pathogenicity 6818.
- Brassica oleracea.**
Gladiolus, *Uromyces transversalis* rust, new records 2203.
- Brassica oleracea.**
Phaseolus vulgaris, southern bean mosaic virus 2098.
- Brassica oleracea.**
Phomopsis host plants, *Amaranthus spinosus*, *Leonotis nepetalefolia*, *Leonurus japonicus*, new records 6826.
- Brassica oleracea.**
Prunus salicina, scald, bacteria, epidemiology 1221.
- Brassica oleracea.**
purple blotch, *Alternaria porri*, incidence, Allium cepa, hybrids, cultivars 7713.
- Brassica oleracea.**
rivers, levels, coliforms, saprophytes 8066.
- Brassica oleracea.**
soil, *Bacillus* role nitrogen fixation 5961.
- Brassica oleracea.**
water pollution, microbial pollution, feces 8971.
- bread.**
Aspergillus parasiticus, aflatoxin B, aflatoxin G 2065.
- bread.**
contamination, *Aspergillus fumigatus* mycotoxins, food poisoning, man, neurological complications 2947.
- bread.**
yeasts 2044.
- breast milk.**
bacteria contamination, pasteurization, cold storage 214.
- breast milk.**
contamination, enterovirus, bacteria, man 4770.
- breast milk.**
cytomegalovirus, storage effects on 1079.
- breeding.**
antimalarial activity, man 1589.
- breeding.**
disease resistance, Brassica oleracea, Brassica rapa, *Plasmodiophora brassicae* clubroot 9477.
- breeding.**
Triticum aestivum, Neovossia indica bunt resistance 5817.
- breeding.**
Vigna unguiculata disease resistance, cowpea aphid-borne mosaic virus, cowpea mosaic virus, bacteria, infection 3138.
- breeding.**
Zea mays, effects on aflatoxins contamination 3880.
- brefeldin A.**
antifungal activity, lipid metabolism, *Candida albicans* 1564.
- brefeldin A.**
Eupenicillium brefeldianum, biosynthesis, oxygen incorporation 4421.
- Bremia lactucae.**
disease resistance, analysis, Lactuca 6865.
- Bremia lactucae.**
downy mildew, disease resistance, genes, Lactuca sativa 3126.
- Bremia lactucae.**
downy mildew, disease resistance, Lactuca sativa 8609.
- Bremia lactucae.**
downy mildew, metalaxyl disease control, Lactuca sativa 5837.
- Bremia lactucae.**
downy mildew, virulence assays, Lactuca sativa 3091.
- Bremia lactucae.**
downy mildew, virulence, association, disease resistance, Lactuca sativa 6820.
- Bremia lactucae.**
Lactuca sativa, penetration, pathogenesis 8587.
- Bremia lactucae.**
infection, Lactuca sativa, virulence, USA, New York, 402.
- Brettanomyces anomalus.**
cellobiose fermentation 4744.
- Brettanomyces anomalus.**
cheese whey conversion, single-cell protein production 9286.
- Brettanomyces clausenii.**
cellobiose fermentation 4744.
- Brettanomyces custersii.**
cellobiose fermentation 4744.
- Brettanomyces intermedius.**
cellobiose fermentation 4744.
- Brevibacterium.**
epoxidation, propylene, metabolism 7462.
- Brevibacterium.**
growth, lysins biosynthesis, molasses effects on 7843.
- Brevibacterium.**
methylketone, production, association, alcohols 7460.
- Brevibacterium.**
suppressors mutants, L-lysine biosynthesis 4571.
- Brevibacterium ammoniagenes.**
ATP biosynthesis, adenine metabolism 7494.
- Brevibacterium.**
cell disruption, methodology glass beads 6337.
- Brevibacterium.**
cell activity testing, association 5-inoic acid production 8776.
- Brevibacterium.**
immobilized cells, coenzyme A biosynthesis, continuous culture 1944.
- Brevibacterium.**
permeability mutants, inosinic acid biosynthesis enhancement, genetic factors 1847.
- Brevibacterium.**
fatty-acid synthetase, quaternary structure, electron microscopy cross-linking, ultracentrifugation 2763.
- Brevibacterium divaricatum.**
biotin stimulation peptidoglycans biosynthesis 1957.
- Brevibacterium divaricatum.**
peptidoglycans, N.M.R. 7441.
- Brevibacterium flammum.**
fumarase, immobilized enzymes, carrageenans use 6472.
- Brevibacterium flammum.**
fumarate hydratase stability, immobilized cells, carrageenans gels 7344.
- Brevibacterium flammum.**
immobilization, use, carrageenans, polyethyleneimine, association, malic acid production, fumarate hydratase activity 4494.
- Brevibacterium flammum.**
immobilized cells, carrageenans, fumarate hydratase activity 7343.
- Brevibacterium flammum.**
lysine biosynthesis, nitrogen sources 3656.
- Brevibacterium flammum.**
lysine biosynthesis, continuous culture 2747.
- Brevibacterium iodinum.**
biosynthesis, phenazine, phenoxazinone 7457.
- Brevibacterium lactofermentum.**
amino acids production, whey 3655.
- Brevibacterium linens.**
biological control, antifungal activity, fungi 2837.
- Brevibacterium linens.**
Brevibacterium linens, antifungal activity, fungi 2837.
- Breweries.**
activated sludge, nutritive value, pigs feeds 5631.
- Breweries.**
industrial effluents, protein production, activated sludge 8932.
- Breweries.**
industrial effluents, wastewater treatment, pH effects on 4438.
- Breweries.**
industrial water systems, disinfection, spoilage bacteria 5321.
- Breweries.**
industrial water systems, Pediococcus contamination, bactericides control 8966.
- Breweries.**
sterilization, cleaning systems 5336.
- brewing.**
media (isolation), yeasts 4528.
- brewing.**
Saccharomyces uvarum, wort, nutrient requirements, ethanol levels 7516.
- brewing.**
yeasts, characterization methodology, ethanol fermentation 1049.
- brewing.**
yeasts, wild type, media (isolation) 4527.
- Brickellia retusa.**
extracts, antiviral agents, vaccinia virus 3343.
- British Isles.**
bacteria, antibiotic sensitivity testing 2463.
- British Isles.**
Brassica seed crops, incidence, Alternaria, Leptosphaeria maculans, surveys 4042.
- British Isles.**
clinical microbiology quality control 711.
- British Isles.**
cooling water, Legionella pneumophila incidence, antimicrobial agents effects on 1706.
- British Isles.**
Enterobacteriaceae, urinary tract isolates, trimethoprim, drug resistance 6007.

British Isles, (continued)

- British Isles.**
Escherichia coli clinical isolates, drug resistance 1540.
- British Isles.**
food contamination, mycotoxins, incidence 3878.
- British Isles.**
food poisoning, Salmonella, Clostridium perfringens, Campylobacter, association, temperature, epidemiology 3828.
- British Isles.**
host plants, bromo mosaic virus 3360.
- British Isles.**
Lolium perenne, Lolium multiflorum, fungi infection incidence 5721.
- British Isles.**
rivers, tobacco necrosis virus isolation, infection, Chenopodium 4020.
- British Isles.**
Salmonella isolation, incidence, man, food, sewers 1075.
- British Isles.**
sand, arylsulphohydrolase, cysteine desulphohydryase, thiosulphate cyanide
- British Isles.**
sucrose phosphorylase, activity 6955.
- British Isles.**
soil improvement, association, Rhizobium Infoli inoculation, Trifolium 6953.
- British Isles.**
Streptococcus pneumoniae, penicillin, chloramphenicol resistance 648.
- British Isles.**
waste disposal sites, anaerobic bacteria phenol biodegradation 3799.
- Brittle root.**
Spiroplasma citri, epidemiology, geographical distribution, Amoracia rusticana 3059.
- Broad bean leaf roll virus.**
+pea early-browning virus+pea enation mosaic virus, interaction role, Vicia faba necrosis 7664.
- Broad bean wilt virus.**
infection, Begonia semperflorens 4982.
- Broad bean wilt virus.**
ringspot, Auga reptans 3043.
- Brochothrix thermosphacta.**
food contamination, meat products vacuum packaging, biological control, Lactobacillus use 4835.
- Brochothrix thermosphacta.**
spoilage, beef, vacuum packaging, refrigeration 5638.
- Brochothrix thermosphacta.**
phages, isolation, beet, characterization 7568.
- Brodipromim.**
+ sulfonamides, antibacterial activity, anaerobic bacteria 3320.
- Brome mosaic virus.**
detection, immunodiffusion, wheat streak mosaic virus, Triticum aestivum, Hordeum vulgare 6757.
- Brome mosaic virus.**
host plants, British Isles 3960.
- Brome mosaic virus.**
infection, 2,4-dioxohexahydro-1,3,5-triazine+guanidine antiviral activity, Hordeum vulgare 6896.
- Brome streak mosaic virus.**
morphology, purification methodology, cytopathology, host range, Gramineae 7666.
- Bromelain.**
Pseudomonas cocovenenans bongrekic acid inhibition 2079.
- Bromide.**
uptake, Gramineae, vesicular-arbuscular mycorrhizas 5101.
- Bromine chloride.**
antiviral activity, poliovirus 2468.
- 5-Bromo-2'-deoxyuridine.**
analogs, antiviral activity, herpes simplex virus 1, herpes simplex virus 2 5214.
- 3-Bromobenzoic acid.**
bacteria, dehalogenation, lakes, sediments 6648.
- Bromodeoxyuridine.**
varicella-zoster virus, cross-resistant, 9-(2-hydroxyethoxymethyl)guanine, phosphonoacetic acid 7897.
- 2-Bromoethanesulfonic acid.**
inhibition, methanogenesis, acetic acid, metabolism, methanogenic bacteria 5136.
- Bromopercillanate.**
inhibition, β -lactamase, bacteria 3404.
- N-Bromosuccinimide.**
chemical modification tryptophan residues, histidine decarboxylase, Micrococcus 24.
- (E)-5-(2-Bromovinyl)-2'-deoxyuridine.**
derivatives, antiviral activity, herpes simplex virus 1, varicella-zoster virus 6073.
- (E)-5-(2-Bromovinyl)-2'-deoxyuridine.**
inhibition, herpesvirus (bovine) 1, glycosylation, glycoproteins 6079.
- (E)-5-(2-Bromovinyl)-2'-deoxyuridine.**
antiviral activity, herpesvirus 5218.
- (E)-5-(2-Bromovinyl)-2'-deoxyuridine.**
antiviral activity, varicella-zoster virus 5211.
- E-5-(2-Bromovinyl)-1- β -D-arabino furanosyluracil.**
antiviral activity, varicella-zoster virus 5211.
- 5-Bromovinyl-2'-deoxyuridine.**
antiviral activity, Epstein-Barr virus replication 9688.
- 5-Bromovinyl-2'-deoxyuridine.**
antiviral activity, herpes simplex virus 1 infected cells, association thymidine kinase 9685.
- Bromus.**
rhabdovirus infection 2118.
- Bromus inermis.**
disease resistance, brown spot, inheritance 6868.
- Bromus inermis.**
disease resistance, screening, leafspot, Pyrenophora bromi 9458.
- Bromus inermis.**
wheat dwarf virus infection 2120.
- Bromus laetevirens.**
wheat dwarf virus infection 2120.
- Bronchitis.**
Enterobacteriaceae isolates, man, antibiotic resistance 1537.
- Broths.**
fermentation, ethanol separation 9238.
- Brown rot.**
Fibroporia angulopora sp. nov., Pseudotsuga menziesii 8650.
- Brown rot.**
fungi, Pinus palustris decay, fluorescence microscopy detection 4047.
- Brown rot.**
Monilia fructicola, disease control, fungicides, orchards, Prunus persica 1405.
- Brown rot.**
Phytophthora citrophthora, disease control, citrus, fungicides, applications, methodology, comparison 8638.
- Brown rot.**
Phytophthora citrophthora, post-harvest decay, disease control, metalaxyl, fruits 1419.
- Brown rot.**
wood decay 6936.
- Brown rot.**
wood supports, coal mines 6934.
- Brown rust.**
disease control, nitrogen fertilizers, fungicides, Hordeum vulgare 5838.
- Brown rust.**
Hordeum, carbon translocation 6769.
- Brown rust.**
nutrients translocation, Hordeum vulgare 3939.
- Brown rust.**
Puccinia recondita var. tritici, susceptibility, Triticum aestivum 3006.
- Brown rust.**
Triticum, germplasm screening, field trials, disease resistance development, India 5726.
- Brown spot.**
Bipolaris oryzae, Bipolaris sorokiniana, mancozeb, resistance, Zizania aquatica 6023.
- Brown spot.**
disease resistance, Bromus inermis, inheritance 6868.

Brown spot, (continued)

- Drechslera oryzae*, *Drechslera sorokiniana*, fungicides, treatment, *Zizania aquatica* 2272.
Oryza sativa 4105.
Passiflora edulis, *Alternaria alternata* infection, characterization 399.
Physoderma maydis, disease control, tillage, *Zea mays* 7736.
Pseudomonas syringae pv. *syringae*, pathogenesis, *Zizania aquatica* 9350.
Scirpina acicola, pathology, *Pinus palustris* 6910.
Septoria glycines, effects on, *Glycine max*, yield 5678.
Septoria glycines, *Glycine max*, lesions, relationship seeds color 5684.
Septoria glycines, temperature, dew, effects on, pathogenesis, *Glycine max* 2105.

Brucella

- antibodies, agglutination 4484.
 brucellosis, cattle, abattoirs, hygiene 8072.
 cross-reactivity *Yersinia*, enzyme-linked immunosorbent assay, brucellosis diagnosis, man 8143.
 isolates, bacteriocins production, USSR 2593.

Brucella abortus

- brucellosis, diagnosis, radioimmunoassay, complement fixation, indirect hemagglutination, cattle 4485.
 lipopolysaccharides, antibodies purification 9914.
 outer membranes proteins, isolation, purification, characterization 1827.

Brucellosis

- cattle, abattoirs, hygiene 8072.
 diagnosis, enzyme-linked immunosorbent assay, *Brucella* cross-reactivity *Yersinia*, man 8143.
 diagnosis, radioimmunoassay, complement fixation, indirect hemagglutination, cattle 4485.

Bruneomycin

- Actinomadura* antibiotic sensitivity testing 6109.

Bryophyllum calycinum

- crown gall, *Agrobacterium tumefaciens* superoxide dismutase activity 5013.

Bryophyllum dalgermottianum

- issue culture, *Agrobacterium tumefaciens* binding, crown gall 2977.

Bryophyta

- Fuligo* intermedia infection, India, new records 2219.

BSC-1 cells

- cell fusion, role, herpes simplex virus 2 mutants 3271.

Bubbles

- association, bacteria, environmental surveys, marine environment, methodology 4495.

Buckeye rot

- Phytophthora nicotianae* var. *parasitica*, *Lycopersicon esculentum*, fertilizers content, nitrogen, phosphorus, potassium, effects on 9445.

Bud

- Chrysanthemum noritolum*, development, effects on vesicular-arbuscular mycorrhizas formation, *Glomus fasciculatus* 4197.
 glycosides, markers, disease resistance, smut, *Ustilago scitaminea*, *Saccharum officinale* 9359.

- Malus domestica*, powdery mildew, temperature effects on survival 1211.

- Malus pumila*, fireblight, *Erwinia amylovora* 1225.

- Vitis vinifera*, powdery mildew overwintering 1270.

- Washingtonia*, rot 1256.

Buttafioles

- milk, contamination, psychrotrophic bacteria, spore-forming bacteria 7578.

Butters

- assays, amylase, β -D-fructofuranosidase, *Chionochloa rigida* grasslands soil, New Zealand 9564.
 phosphate, blood culture, sodium chloride, *Legionella pneumophila* 851.
 phosphates, hydrogen peroxide formation, electric currents, cytotoxicity, *Escherichia coli* 2451.

Bulbs

- effects, disease control, *Fusarium oxysporum*, quintozene + ferbam 1427.
Trichoderma harzianum treatment, + soil solarization, integrated control, soil-borne diseases, *Idiacea* 7768.
Tulipa, *Iris*, *Rhizoctonia solani* survival, storage conditions effects on 3973.

Bulbosamide

- antifungal activity, dermatophyte fungi 9682.

Bulgecin

- interaction, β -lactam antibiotics, effects on, bacteria, morphology 2461.

Bullera

- enzymes, electrophoresis 7422.

Bunchy top

- Lycopersicon esculentum*, new records, India 3042.

- viruses, disease transmission, *Pentalonia nigronervosa*, *Musa paradisica* 7677.

Bunt

- Neovossia indica*, *Triticum aestivum*, nitrogen, agricultural practices, effects on, incidence 1159.
Neovossia indica, *Triticum aestivum*, relationship bakery products properties 5708.

- Neovossia indica*, *Triticum aestivum*, screening methodology 6350.

- Tilletia controversa*, disease control, fungicides seed treatments, *Triticum aestivum* 4110.

- Tilletia controversa*, spores contamination, grain, *Triticum aestivum* 1329.
Tilletia, *Triticum aestivum* 1196.

- Triticum aestivum*, *Tilletia controversa*, disease control, fungicides foliar applications 4111.

Bunyavirus

- hemagglutination, proteins stabilization 3545.

Burn infection

- isolates, *Acinetobacter calcoaceticus*, antibiotic sensitivity testing 1597.

Burning

- agricultural practices, soil microorganisms, population levels 9622.
 crop residues, soil, *Cochliobolus sativus*, vertical distribution, *Triticum aestivum* 9358.
 disease control, *Rhizoctonia solani*, sheath blight, *Oryza sativa*, overwintering 4953.
 soil properties, effects on growth, mycorrhizas, *Pseudotsuga menziesii*, *Tsuga heterophylla* 520.
 wood, fungi infection, airborne microorganisms, effects of public health, man 4454.

Burrows

- Parastacoides tasmanicus*, effects on soil microorganisms, respiration, peatlands 7803.

Bursaphelenchus xylophilus

- wilt, *Pinus*, disease control, pesticides uptake 5877.

Butachlor

- effects on *Rhizoctonia solani*, damping-off, *Vigna unguiculata* 9482.

Butane

- production, anaerobic bacteria, cattle feces fermentation 5138.

2,3-Butanediole

- biosynthesis, *Klebsiella pneumoniae*, acetoin reduction 9232.
 isomers production, bacteria fermentation 7505.
Klebsiella pneumoniae, biosynthesis, cultural characteristics 8370.
 production, *Klebsiella pneumoniae*, hydrolysis, hemcellulose 3739.

2,3-Butanedione

- chemical modification glyceraldehyde-phosphate dehydrogenase arginine residues, effects on physicochemical properties, kinetics, *Saccharomyces cerevisiae* 7352.
 chemical modification transketolase active sites arginine residues, effects on kinetics, *Saccharomyces cerevisiae* 7355.
 chemical modification transketolase, effects on kinetics, *Saccharomyces cerevisiae* 6555.
Lactobacillus production, pyruvic acid effects on 4721.

Butanol

- biosynthesis, *Clostridium acetobutylicum*, fermenters 119.
 biosynthesis, *Clostridium beijerinckii* 7865.
 fermentation, *Clostridium beijerinckii* immobilized cells 4737.
 +isopropanol, +ethanol, fermentation, *Clostridium beijerinckii* immobilized cells 9241.
 production, *Clostridium acetobutylicum* 2865.
 production, *Clostridium acetobutylicum*, continuous culture 1037.
 production, *Clostridium acetobutylicum*, continuous culture, batch culture, nitrogen limitations 8393.
 production, *Clostridium acetobutylicum*, media (culture) effects on 2660.
 production, *Clostridium beijerinckii*, *Clostridium aurantibutylicum* 2845.
 production, pH effects on, *Clostridium acetobutylicum* 5563.
 Silicic acid, adsorption, *Clostridium acetobutylicum*, fermentation 4739.

1-Butanol

- production, *Clostridium acetobutylicum*, use, *Pinus radiata* hydrolysates 8390.

Butiobiote

- role, *Saccharomyces cerevisiae* cytochrome P-450 inhibition 9488.

Butirosin A

- acetylation, *Streptomyces fradiae* resistant mutant 5164.

Butt rot

- Heterobasidium annosum, *Sparassis crispa*, *Calocera viscosa*, pathology, *Coniferes* 4179.

Butter

- cold storage temperature effects on growth, coliforms, yeasts 8465.

- psychrotrophic bacteria contamination, lipase, off flavor 209.

Buttermilk

- production, bacteria fermentation effects on proteins 4805.
 production, lactic acid bacteria starter cultures temperature 4802.

Butylacetate

- effects on, benzylpenicillin production 7148.

Butyated hydroxyanisole

- + amphotericin B, antifungal activity, *Candida albicans* 6175.

antibacterial activity

- antibacterial activity, *Staphylococcus aureus*, electron transport system 6050.
 antimicrobial activity, *Escherichia coli*, *Staphylococcus aureus*, *Candida albicans* 4319.
 effects on *Aspergillus*, growth, aflatoxins biosynthesis 5646.
 + amphotericin B, antifungal activity 700.

t-Butyated hydroxyquinone

- antimicrobial activity, *Escherichia coli*, *Staphylococcus aureus*, propyl gallate 4319.

Butyated hydroxytoluene

- antibacterial activity 7084.

- effects on *Aspergillus*, growth, aflatoxins biosynthesis 5646.

2,3-Butylene glycol

- production, *Bacillus polymyxa*, *Streptococcus faecalis* 1040.

Butylhydroxyanisole

- antibacterial activity, *Salmonella typhimurium*, poultry 2035.

Butyraldehyde

- odors compounds, *Pseudomonas*, *Bacillus*, *Corynebacterium* 5580.

Butyrobacterium methylotrophicum

- methanol conversion 9216.

Butyric acid

- bacteria, fermentation, mathematical models 9065.
 biosynthesis, thermodynamics, *Pseudomonas aeruginosa* 8201.
 carbon sources, *Rhodospseudomonas capsulata*, hydrogen production 7469.
Clostridium acetobutylicum, effects on glucose fermentation 4726.
 substrates, *Rhodospseudomonas capsulata*, hydrogen production 8386.

n-Butyric acid

- antifungal activity, wheat post-harvest decay 441.

Butyrvibrio

- cattle rumen microorganisms, media (isolation) use ribulosebiphosphate carboxylase 7243.

Butyrolactone

- biosynthesis, *Streptomyces viridochromogenes*, inducers 3443.

- derivatives biosynthesis, *Aspergillus terreus* 9223.

Butyryl-CoA dehydrogenase

- purification, analogs characterization, *Megasphaera elsdenii* 8224.

- substrate analysis inactivation, *Megasphaera elsdenii* 1887.

Byssochlamys

- patulin, incidence, *Beta vulgaris* roots feeds 1089.

C.D.

- autocoryn 61, albocoryn 32, albocoryn ϵ structure, *Streptomyces* 2573.
 antibiotics DNA complex 7971.
 bacteriorhodopsin secondary structure, purple membranes, *Halobacterium halobium* 6393.
 macromycin, autocoryn 2826.
 molybdenum, tungsten containing formate dehydrogenase (NADP⁺), multiple form *Clostridium thermacetatum* 8280.
 ribosomal protein L29, ribosomal protein L30 structure, *Escherichia coli* 1838.
 ribosomal proteins, ribosomal subunit 505, *Escherichia coli* 7298.
 subtilisin conformation, *Bacillus subtilis* 90.
 subtilisin conformation, pH, urea effects on, *Bacillus subtilis* 89.

- D., (continued)**
 ribredoxin folding, conformation, *Escherichia coli* 5463.
 ransketolase substrate specificity, *Saccharomyces cerevisiae* 7353.
Type virus.
 infectivity preservation, freeze-drying 1745.
- proteins, interspecific interactions, enzyme-linked immunosorbent assay 1760.
N. Ratios.
 association, wastes composting 4448.
 soil litter, decomposition, *Pinus sylvestris* 3161.
 nitrogen cycle, decomposition, leaf litter, forests 528.
 peat biodegradation, anaerobic conditions 9264.
 soil microorganisms, organic matter decomposition, soil amendment, crop residues 5986.
 soil microorganisms, respiration, decomposition, straw 6966.
 wood, decay, *Picea sitchensis*, *Tsuga heterophylla*, forests 527.
- Peaco.**
 swollen shoot virus infection, yield 391.
Peaco swollen shoot virus.
 enzyme-linked immunosorbent assay detection, *Theobroma cacao* 7221.
- Pectinase.**
 soft rot, *Pseudomonas* 1291.
Pectin virus X.
 isolates characterization, *Hyalococcus undatus* 5019.
- Pedang-cadang.**
 incidence, *Cocos nucifera*, Philippines 1208.
Pedang-cadang disease viroid.
 cadang-cadang, incidence, *Cocos nucifera*, Philippines 1208.
- Pendane.**
 oxygenation derivatives, *Cyathus striatus* 7463.
- Pendium.**
 +acid rain, pollution effects, viability, soil microorganisms 9509.
 antibacterial activity, interaction radiosensitivity, *Escherichia coli* 7915.
 Bacteroides susceptibility 681.
 bioaccumulation, microorganisms, pollution effects 794.
 effects on ammonification, nitrification, nitrifying bacteria, soil pollution 4238.
 effects on ectomycorrhizas, growth 3189.
 resistance, R factors, *Staphylococcus aureus* 2403.
 sensitivity, association, antibiotic resistance, *Escherichia coli* plasmids 1536.
 soil amendment, sewage sludge, effects on soil microorganisms, growth 5988.
 uptake, soil microorganisms 1489.
- Pessula axillaris.**
 essential oils, antifungal activity, *Helminthosporium oryzae* 4297.
- Pfaffia.**
 biodegradation, *Pseudomonas putida*, immobilized cells, characterization 1065.
 enhancement, furazolidone antibacterial activity, *Vibrio cholerae*, *Vibrio parahaemolyticus* 1560.
- Pleurocajan.**
 asymptomatic infection, *Fusarium oxysporum* f.sp.cicari 4938.
 colonization, saprophytes, *Fusarium udum* 5694.
 isolates, *Rhizobium* characterization 7821.
 leafspot, *Alternaria*, India 3926.
 mycoplasma-like organisms witches' broom incidence, USA, Florida, association, rhadovirus infection 4945.
 rhizobium hydrogen release, *Rhizobium japonicum* nitrogen fixation 7558.
 plant breeding, disease resistance, *Phytophthora drechsleri* f.sp.cajani 5038.
Rhizobium nodulation, yield, growth 9606.
 rhizosphere, germination, fungistasis 558.
 screening, disease resistance, wilt, *Fusarium udum* 1367.
 seed germination, *Aspergillus* effects on 7796.
 seed-borne fungi infection, isolation, identification 7650.
 wilt, *Fusarium udum*, disease transmission, *Isopora* 2987.
- Plathia.**
 leafspot, *Drechslera setanae* 9426.
- Platification.**
 bacteria, calcium carbonate, caves 8711.
- Platium.**
 effects on enolase substrates binding, N.M.R., yeasts 6544.
 effects on, *Penicillium expansum*, post-harvest decay, *Malus domestica* 8598.
 effects on, ticarcillin: tobramycin, antibacterial activity, *Pseudomonas aeruginosa* 754.
 endonuclease deoxynucleotides inhibitors complex, conformation, N.M.R., *Staphylococcus aureus* 7395.
 levels, granules, mycorrhizas, *Fagus* 6973.
 relationship *Laetisaria fuciformis* infection, *Lolium perenne* 9357.
 supplementation, single-cell protein, yeasts, feeding trials, chickens 9285.
- Platium agnate.**
 gels, Gluconobacter oxydans immobilized cells, glucose metabolism kinetics, gluconic acid biosynthesis 5467.
 immobilized cells, *Lactobacillus vaccinostercus* sp.nov., lactic acid biosynthesis 4565.
- Platium carbonate.**
 caves, bacteria, calcification 8711.
 effects on, pathogenesis, clubroot, *Plasmodiophora brassicae*, Cruciferae 4255.
 effects on *Plasmodiophora brassicae* clubroot, crop fields 314.
 soil amendment, effects on *Rhizobium*, nodulation, yield, *Glycine* max 9582.
- Platium chloride.**
 disease control, *Penicillium expansum*, post-harvest decay, apples 5796.
 preservatives, tissues cold, association, viruses infection, plants 2093.
- Platium fluoride.**
 transformation, dental caries prevention, man 814.
- Platium gluconate.**
 production, *Aspergillus niger*, media (culture) 6608.
- Platium hydroxide.**
 dental restorative materials, antibacterial activity, *Streptococcus sanguis* 6052.
 soil amendment, effects on nitrogen fixation, nodulation, *Elaeagnus umbellata* 1506.
- Platium nitrate.**
 effects on, disease resistance, powdery mildew, *Erysiphe graminis*, *Triticum aestivum*, *Hordeum vulgare* 378.
 effects on, root rot, *Phytophthora cinnamomi*, *Persea indica* 2147.
- Platium oxalate.**
 crystals, detection, roots, mantles, *Eucalyptus marginata*, *Pinus radiata*, association, ectomycorrhizas symbiosis 4211.
 occurrence, nutrient dynamics, microorganisms, decomposition, forests, *Eucalyptus*
- Calcium oxalate, (continued)**
 diversicolor 4136.
- Calcium oxide.**
 agricultural practices, effects on incidence, *Gaeumannomyces graminis* var.tritici, lake-all, *Triticum aestivum* 9361.
 antibacterial activity, coliforms 8982.
 +nitrate+benomyl, integrated control, *Fusarium oxysporum* f.sp.lycopersici, wilt, *Lycopersicon esculentum* 4107.
 +nitrate+benomyl, integrated control, *Fusarium oxysporum* f.sp.lycopersici, wilt, *Lycopersicon esculentum* 4108.
- Calcium peroxide.**
 antimicrobial activity, relationship, seed treatments, *Triticum aestivum* 7773.
- Calcium sulfate.**
 effects on, *Plasmodiophora brassicae* clubroot, crop fields 314.
- Calculator.**
 use, most probable number, bacteria, aquatic environment 8139.
- Calidariomyces fumago.**
 chloride peroxidase, concentration effects on activity 4659.
 chloride peroxidase isoenzymes, purification 2757.
- Calicivirus.**
 feces, detection, radioimmunoassay 9847.
 pathogens, heat inactivation, heat resistance, biological control, *Amyeloid transtella* 5549.
- Callistophus chinensis.**
 plant diseases, *Spiroplasma citri*, disease transmission, *Macrosteles fascitrons* 6803.
 yellows, mycoplasma-like organisms, antigens, detection, enzyme-linked immunosorbent assay, immunoelectron microscopy 8597.
- Callose.**
 formation, plants, *Phytophthora cinnamomi* infection, host range 3901.
 formation, Zea mays, response, *Phytophthora cinnamomi*, infection 3020.
- Calunne vulgaris.**
 heaths, soil, fatty acids isolation, identification, phytotoxicity, antifungal activity 5929.
 heaths soil, microorganisms biodegradation production fatty acids, antifungal activity, seasonal variations 5930.
- Callus.**
 deposition, role boron, disease resistance, tobacco mosaic virus, *Nicotiana tabacum*, *Phaseolus vulgaris* 1377.
Nicotiana, production, phytoberin, phytoberol, association, *Pseudomonas solanacearum* infection 6845.
 Ruta graveolens+fungi mixed culture, acridone epoxides biosynthesis 7266.
 viruses disease spread, *Chrysanthemum*, *Lycopersicon esculentum* 5793.
- Callus culture.**
Nicotiana tabacum, glycoproteins purification, agglutination, *Phytophthora parasitica*, *Pseudomonas solanacearum* 1351.
Solanum melongena, *Mycoplasma* infection 3302.
- Calmodulin.**
 activation adenylylate cyclase, *Bordetella pertussis* 7349.
- Calocera viscosa.**
 butt rot, pathology, *Coniferales* 4179.
- Calocybe indica.**
 culture 3804.
- Calopogonium caeruleum.**
 yield, nitrogen fixation, *Rhizobium* inoculation 9617.
- Calopogonium mucunoides.**
 cowpea severe mosaic virus infection 4930.
- Calories.**
 content, *Linum usitatissimum* seeds, *Aspergillus niger*, *Fusarium oxysporum* effects on 7722.
- Calorimetry.**
 +fermenters, measuring techniques, microorganisms heat balance, in vitro 7215.
 glucose, metabolism, *Vibrio alginolyticus*, measuring techniques 1772.
 methodology, characterization, *Saccharomyces cerevisiae*, *Saccharomyces carlsbergensis* 7272.
 methodology, heat production, aquatic bacteria 8145.
Saccharomyces cerevisiae ethanol fermentation, maintenance energy, biomass concentration 7528.
- Caloscypha fulgens.**
 penetration, pathogenesis, *Picea sitchensis* seeds 3174.
- Calosporella inaeili.**
 biodegradation, *Acer pseudoplatanus*, ecological distribution 4181.
- Calvatia gigantea.**
 α-amylase production, characterization, culture methodology 2772.
- Calypeltia campanula.**
 root rot, *Lycopersicon esculentum*, new records 4026.
- Camellia sinensis.**
 anthracnose, *Gloeosporium theae-sinensis* 4014.
- Camellia reticulata.**
 susceptibility, dieback, canker, *Glomerella cingulata*, pathology 2190.
- CAMP protein.**
 production, *Streptococcus agalactiae* growth, fermenters 6398.
- Campylobacter.**
 aerobic conditions tolerance, media (culture) 5400.
 clinical isolates, antibacterial activity, cefazidime, cefotaxime, moxalactam 4365.
 disease transmission, role, milk, reviews 211.
 food contamination, isolates 192.
 food poisoning, association, temperature, epidemiology, British Isles 3828.
 media (isolation), microenvironments, aerobic conditions, methodology 9979.
 norfloxacin antibacterial activity 7057.
 plasmids, isolation, methodology 5423.
- Campylobacter coli.**
 mik, survival, temperature effects on 189.
- Campylobacter fetus.**
 media (transport) 2694.
 norfloxacin, gastrointestinal tract, clinical isolates, antibacterial activity 2455.
 toxicity, food contamination, man, reviews subsp.jejuni 173.
- Campylobacter fetus subsp. jejuni.**
 food contamination, meat, animals carcasses 1090.
- Campylobacter fetus subsp. fetus.**
 most probable number, food contamination, poultry, milk 231.
 survival, curing, cheddar cheese 2032.
- Campylobacter fetus subsp. intestinalis.**
 antibacterial activity, rosamycin, erythromycin, clindamycin 8863.

Campylobacter fetus subsp. intestinalis, (continued)

survival, skim-milk, beef, temperature, pH effects on 217.

Campylobacter fetus subsp. jejuni,

antibacterial activity, bicyclomycin 2595.

antibacterial activity, disinfectants 5169.

antibacterial activity, roxarsamycin, erythromycin, clindamycin 8863.

ascorbic acid, inhibition, growth 3327.

clinical isolates, antibiotic sensitivity testing, kanamycin, gentamicin,

chloramphenicol, nalidixic acid, clindamycin 6099

contamination, meat, public health surveys 1081.

contamination, turkeys, milk 4787.

drug sensitivity testing 4292.

drying, survival, surfaces, sanitation 807.

enteritis, clinical isolates incidence, man 8733.

enteritis, man, epidemiology, Sweden, food contamination 2055.

enteritis, man, food contamination, milk 1078.

enteritis, streams, drinking water 5280.

enumeration methodology, aquatic environment 2676.

food contamination 8456

food contamination, chickens, abattoirs 2925.

food contamination, chickens carcasses 1082.

food contamination, livers, chickens 3277.

food contamination, poultry, incidence 3840.

food contamination, poultry, meat industry 5663.

gastroenteritis, food poisoning, man 2040.

gastroenteritis, water-borne diseases, man, drinking water 2633.

heat sensitivity, pasteurization, milk 2060.

isolation, cow's milk, cattle 4790.

isolation, media (enrichment) 9936.

isolation methodology, incidence, milk 8131.

isolation, poultry 5605.

isolation, poultry, media (enrichment), temperature, time, pH, effects on 8141.

media (culture) 2899.

media (enrichment) 3944.

media (transport), isolation, feces, man 9977.

milk, survival, temperature effects on 189.

, minced meat 1071.

morphology motility, viability, ferrous sulfate, sodium metabisulfite, sodium

pyruvate, media (culture) 9974.

survival, skim-milk, beef, temperature, pH effects on 217.

Campylobacter nitrofiligilis sp. nov.,nitrogen fixation, *Spartina alterniflora* 7856.**Canada,**blister rust, *Pinus*, Rodentia, feeding damage 2318.

Euphorbia pulcherrima, poinsettia mosaic virus infection incidence 5014.

forests, soil microorganisms, biological activity, biodegradation, wood 6893.

Glycine max, *Rhizobium japonicum* effects on yield 7861.

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

oil pipelines, bacteria biodegradation, hydrogen sulfide production association

Candida albicans, (continued)

antifungal activity, penicillone/nitrobenzene metabolites 8789.

antifungal activity, polyene antibiotics, imidazoles, association endocarditis

7935.

antifungal activity, silver nylon fabrics 3371.

antifungal activity, sorbic acid, pH 7065.

antifungal activity, vanillin, eugenol 2470.

antifungal activity, 2,7-diamidino-9H-fluorene-9-one 2472.

antifungal activity, 3-acetyl-4-hydroxy-6-methyl-2H-thiopyran-2-ones,

3-acetyl-4-methoxy-6-methyl-2H-thiopyran-2-ones, bromination, derivatives 2493.

antimicrobial activity, *Acorus calamus* essential oils, sophora extracts 2495.

antimicrobial activity, butylated hydroxyanisole, t-butylated hydroxyquinone,

propyl galate 4319.

antimicrobial activity, oxynil triphenyl phosphonic acids derivatives 9700.

antimicrobial activity, pectinate 8910.

candidiasis, diagnosis, mannose, arabinotriol detection, gas chromatography 9993.

cell culture, formalin antifungal activity 8793.

cell distribution, methodology 2724.

cell walls, antifungal activity, amphotericin B, nystatin, imidazoles 2477.

chemicals, antifungal activity 3336.

clinical isolates, 5-fluorocytosine resistance 1528.

diaryl sulfides, antifungal activity 2482.

differentiation, *Candida stellatoidea*, methodology 4546.

drug tolerance, oral microflora, man 4271.

enzymes, detection, methodology 8168.

5-fluorocytosine antifungal activity, mechanisms 4298.

1,3- β -D-glucan synthase, purification, characterization 66.

growth, morphology, polyoxin D effects on 7170.

hyphae viability, methodology 7274.

identification, use killer factor 9991.

imidazoles, derivatives, antifungal activity 2480.

infection, man, ketoconazole, treatment, drug resistance 4274.

ketoconazole antifungal activity, pH effects on 3334.

ketoconazole antifungal activity, pH effects on 5201.

lipid metabolism, antifungal activity, brefeldin A 1564.

2-mercaptopbenzothiazole diesters antifungal activity 3340.

peptidase, column chromatography, electrophoresis, colorimetry 6542.

phospholipase, extracellular enzymes, assays, Petri dishes 7327.

plasma membranes, freeze-fracture, antifungal activity, amphotericin B 8009.

polymer membranes, sterol composition, antibiotic resistance, nystatin 3277.

polyoidal, antifungal activity, biosynthesis, *Pseudowintera colorata* 688.

proteinase, purification, characterization 7328.

protoplast fusion hybrids, nystatin resistance 658.

quinazolones antifungal activity 2476.

sodium hypochlorite decontamination, skin tissue culture 8092.

seroplasma formation, antifungal activity, imidazoles, scanning electron

microscopy 3337.

UDPAcetylglucosamine pyrophosphatase, assays 58.

use, drug sensitivity testing, antimicrobial agents efficacy 9702.

Candida bolinii,

ATP biosynthesis, AMP oxidative phosphorylation 1031.

cell distribution, methodology glass beads 6337.

Candida brassicae,

continuous culture, biomass production, computer applications 8167.

Candida cylindracea,

triacylglycerol lipase, immobilized enzymes, triacylglycerides hydrolysis 5501.

Candida freyachussii,

cellulose fermentation 4744.

Candida guilliermondii,

asparaginase stability, freezing, drying 7333.

autolysis, alkaline effects on 7867.

cell walls, high molecular weight glycoproteins, hydrocarbons effects on 7868.

continuous culture, association, pH, temperature 2725.

drug tolerance, oral microflora, man 4271.

extracts, purification, characterization, antibacterial activity 3317.

hydrocarbons utilization 7866.

paraffin metabolism, continuous culture 2390.

single-cell protein production, nutrient sources, molasses, wine fermentation

sediments 5628.

Candida intermedia,

cheese whey, trace elements effects on 3817.

L-idiol fermentation 9248.

nutrient uptake, fermentation 128.

Candida krusei,

acidity, heat inactivation, fruit juices 5636.

cytochrome c, heme iron coordination geometry, N.M.R. 3643.

drug tolerance, oral microflora, man 4271.

Geotrichum candidum, Hansenula anomala, mixed culture, protein biosynthesis,

whiskey distilleries wastes 15.

heat inactivation, fruit juices 2039.

single-cell protein 8489.

single-cell protein production, nutrient sources, molasses, wine fermentation

sediments 5628.

Candida lipolytica,

acetyl-CoA carboxylase 8219.

acetyl-CoA synthetase isoenzymes, purification, characterization 8222.

continuous culture, sea water 8089.

purification, characterization, D-acetylsaline (thiol)-lyase 6406.

respiration, fermentation heat, carbon sources 145.

Candida lusitanae,

cellulose fermentation 4744.

cellulose fermentation, ethanol production 9226.

Candida melibiosica,

cellulose fermentation 4744.

Candida obtusa,

cellulose fermentation 4744.

Candida oleophila,

alkanes nutrient sources, biomass production, fermenters 7535.

biomass production, n-alkanes utilization 5993.

Candida parapsilosis,

antibiotic resistance, amphotericin B 3308.

diaryl sulfides, antifungal activity 2482.

ketoconazole antifungal activity, pH effects on 5201.

naffrine antifungal activity ultrastructure, sterols, biosynthesis 7930.

Candida pseudotropicalis,

ethanol production, factors affecting 1046.

beta pseudotropicalis, (continued)

duction, biomass, β -D-galactosidase, whey utilization 8307.

beta rugosa,

β -hydroxycarboxylic acid biosynthesis 5481.

plants, β -hydroxypropionic acid production 5474.

plants, β -hydroxyisobutyric acid production 4583.

beta shenatae,

xylose fermentation, ethanol production 8407.

beta sonensis,

seasonal variation, rot, *Opuntia stricta*, food sources, *Drosophila* 3048.

beta stellatoides,

fermentation, *Candida albicans*, methodology 4546.

lg tolerance, oral microflora, man 4271

beta tenuis,

cellular conversion 3769.

beta tropicalis,

4-COA oxidase, purification, characterization 7427.

antifungal activity, naphtho(1,2,3-b)-thiazoles derivatives 7092.

degradation, tridecane, metabolic pathways, α,ω -tridecanedioic acid 2002.

nitrite acetyltransferase, purification 2781.

distribution, methodology 2724.

extracellular relationship, actinomycetes *levorin* biosynthesis 6233.

aryl sulfides, antifungal activity 2482.

distilleries industrial effluents, growth conditions 9231.

decanedioic acid biosynthesis, n-dodecane precursors 14.

mobilized cells, production, α,ω -dodecanedioic acid,

α,ω -tridecanedioic acid 1840.

proteomes, cytochrome P-450, purification, characterization 2750.

protein, degradation, single-cell protein production 5992.

glc-cell protein production, acids hydrolysis, *Oryza sativa* crop residues

9109.

glc-cell protein production, use cellulose hydrolysis, cellulolytic bacteria

4774.

beta utilis,

impurities reduction 7281.

continuous culture, ethanol metabolism, biomass yield, oxygen effects on 7509.

1,3- β -D-glucanase, self-association 44.

ends, protein composition, association, temperature 1087.

mentation induction, factors affecting 8400.

urouracil drug resistance, role transport 642.

with, bioreactors+ejector, hydrodynamics 9987.

growth, ethanol biosynthesis, fermenters 158.

mathematical models, continuous culture, oxygen effects on ethanol production

1731.

D⁺ kinase, purification, characterization 62.

lactate pastoris, amine oxidase (flavin-containing), physicochemical properties

comparison 8240.

Pseudomonas, mixed culture, mesquite wood, cattle feeds production 4866.

production, fermentation heat, carbon sources 145.

mpicin effects on physiology 8859.

IPA, isolation, ion-exchange chromatography 5480.

ts like flavorings, use food 4780.

glc-cell protein, chemical composition, amino acid composition, production,

industrial effluents, distilleries 9118.

glc-cell protein, feeding trials, immune response, gastrointestinal tract,

guys 2929.

glc-cell protein production, musts 5472.

glc-cell protein production, nutrient sources, molasses, wine fermentation

sediments 5628.

ate oxidase, cyanide inhibition, mechanisms 945.

late treatment, ethanol fermentation wastes, by-products recovery 9803.

beta valida,

chemical characteristics, alcoholic beverages, fermentation 243.

beta wickerhamii,

bioassay fermentation, ethanol production 9226.

mentation, glucose, cellulose 7533.

beta zelleri,

phenols, mannose, arabinitol detection, gas chromatography 9993.

prescence diagnosis, tissues 4525.

idence, man, *Nigeria*, methodology 1812.

in cavity, clinical isolates, *Candida albicans*, antibiotic resistance, nystatin

7446.

beta distemper virus,

parvovirus (canine), parvovirus (canine), Leptospirosis, bacterins,

bacterins, vaccines, immunogenicity, dogs 8924.

agens, immunoglobulin G, detection, enzyme-linked immunosorbent assay,

methodology 5369.

combined vaccines, antibody response, dogs 3449.

beta er,

es concolor, temperature effects on 4157.

idiomycetes, disease resistance, rootstocks, *Malus* 2259.

ryosphaeria dothidea, orchards 1223.

ryosphaeria dothidia, fumigants disease control, *Malus pumila* 492.

tiandrum sativum, pathophysiology, Protomyces marcosporus role 7711.

tiandrum sativum, spatial distribution, environmental factors, *Pinus monticola*

146.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

tiandrum sativum, disease resistance, role, *Eucalyptus phenols* 5814.

Canker, (continued)

Lycopersicon esculentum, pathogenesis, *Corynebacterium michiganense*

subsp.michiganense, yield 8579.

microorganisms, *Prunus cerasifera*, Nematoda effects on pathogenesis 1212.

Monochaeta unicornis, *Cupressus lusitanica*, incidence, Kenya 4151.

Nectria cinnabarina, *Gleditsia triacanthos*, association roots pruning 9525.

Nectria cinnabarina, pathology, *Gleditsia triacanthos* 2314.

Nectria galligena, *Pezizula malicorticis*, *Phytophthora cactorum*, *Stereum*

purpureum, disease resistance, *Malus pumila* 1357.

Phomopsis eleagnis, *Eleagnus angustifolia*, incidence, USA, Michigan 9522.

Phytophthora palmivora, maneb, chlorothalonil disease control, *Carica papaya*

5058.

Phytophthora palmivora, *Theobroma cocoa*, metalaxyl treatment, disease control

1417.

Pseudomonas syringae pv.syringae, disease control, fumigation, *Prunus domestica*

5743.

Rosa, disease control, fungicides 1410.

Scirpus cardinalis, pathology, *Cupressus sempervirens* var.stricta, *Cupressus*

sempervirens var.horizontalis 5869.

Synchytrium, *Cucumis melo* var.mamordica, pathogenesis 6782.

Synchytrium, *Sesamum indicum*, pathogenesis, ultrastructure 9439.

Synchytrium trichosanthidis, *Cucumis melo* var.mamordica, anatomy analysis 3976.

Xanthomonas campestris pv.citri, pathology, *Citrus* 5741.

Cannabis sativa,

cigarettes, contamination, fungi, actinomycetes 8172.

Canned food,

meat, disease control, bacteria, fungi 3807.

preservatives, emulsifiers, antibacterial activity, anaerobic bacteria 255.

Canned products,

Geotrichum food contamination, counting methods 4776.

Canning,

food processing, rice, food contamination 256.

food processing, sterilization 268.

mushrooms, heat transfer, inactivation *Clostridium botulinum* spores 1093.

sterilization, heat transfer 2059.

tomatoes, juices, sterilization, baths 262.

Cannopis,

forests, soil microorganisms, effects on nitrogen cycle 512.

Cantaleupes,

post-harvest decay, fungi, control, use, benomyl+guazatine 6835.

post-harvest decay, fungi, disease control, fungicides 1399.

Capillary,

glass, bacteria deposition, mathematical models 9884.

Capnocytophaga,

N-acetylmucosulfonates, purification methodology 4509.

media (selective), blood culture, agar 9906.

periodontal diseases isolates, antibiotic sensitivity testing 3376.

taxonomy, identification keys, computer programs 843.

Capreomycin,

drug resistance, *Mycobacterium tuberculosis*, clinical isolates, Korea Rep. 9656.

Caprylanilide,

derivatives, antibacterial activity 9665.

Capsum,

disease resistance, tobacco mosaic virus infection 1335.

leaves, magnesium levels, leafspot susceptibility, *Xanthomonas campestris* 5841.

phosphate uptake, vesicular-arbuscular mycorrhizas 6948.

tobamovirus infection, serotyping 4032.

Capsum annum,

Alternaria alternata infection, penetration mechanisms 2215.

blight, *Chenopodium quinoa*, pathogenicity 4004.

x Capsum chinense, disease resistance, genetic relationship, disease

tolerance, pepper mottle virus 4093.

cucumber mosaic virus, induction, inclusions, morphogenesis 8573.

cucumber mosaic virus isolation, identification 3036.

disease resistance, tobacco mosaic virus 3109.

growth, yield, *Glomus fasciculatus* vesicular-arbuscular mycorrhizas inoculation

effect on 4227.

infection, potato virus Y, potato virus X, cucumber mosaic virus 7699.

leafspot, *Xanthomonas campestris* pv.vesicatoria, disease resistance 7742.

necrosis, *Pseudomonas syringae* pv.tomato, etiology 3065.

pepper mild mosaic virus infection, purification, characterization 409.

pepper vein banding virus infection, epidemiology 3034.

Phytophthora capsici infection, epidemiology 5792.

role, phytoalexins, latent infection, *Glomerella cingulata* 4070.

scab, *Xanthomonas campestris* pv.vesicatoria, pathology 8575.

seeds microflora, fungicides effects on 5832.

spot, pathogenicity, *Xanthomonas vesicatoria* races 1309.

spot, *Xanthomonas campestris* pv.vesicatoria 7696.

Capsum chinense,

x Capsum annum, disease resistance, genetic relationship, disease

tolerance, pepper mottle virus 4093.

Capsum frutescens,

mosaic disease, potato virus Y, epidemiology 3032.

rot, *Glomerella cingulata*, association, iron 3999.

-Verticillium dahliae infection, plant extracts, antifungal activity,

Cladosporium cucumerinum 8877.

Capsules,

3-deoxy-D-manno-octulosonic acid containing polysaccharides, *Escherichia coli*,

structure 9191.

Haemophilus influenzae, polysaccharides, carbohydrate composition, N.M.R. 7438.

Klebsiella, polysaccharides, oligosaccharides purification 8335.

Klebsiella, polysaccharides, structure 9197.

Nisseria meningitidis, polysaccharides structure 4701.

polysaccharides, *Haemophilus influenzae*, association cotrimoxazole tolerance

1562.

polysaccharides, *Rhizobium japonicum*, role nodulation Glycine sac 3237.

Rhizobium, polysaccharides structure 7437.

Rhizobium trifolii, binding lectins, roots exudates, *Trifolium repens* 1508.

Streptococcus pneumoniae, polysaccharides, structure 6579.

Streptococcus pneumoniae, polysaccharides, structure 9195.

Captatol,

antifungal activity, in vitro, *Phytophthora palmivora* 5824.

disease control, blight, *Nectria cinnabarina*, *Malus pumila* 4120.

disease control, leafspot, *Apium graveolens* 4098.

Captafol, (continued)

- disease control, leafspot, *Pestalotzia palmarum*, *Helminthosporium*, *Cocos nucifera* 1391.
- effects on seeds microflora, *Capsicum annuum* 5832.
- Entomophthoraceae infection, *Aphis fabae*, effects on 489.
- +pamts, disease control, *Chondrostereum purpureum*, wound infection, *Prunus armeniaca*, *Prunus avium* 8629.
- gophyllaxis, treatment, *Phytophthora palmivora* infection, orchards 5828.

Captan,

- +benomyl treatment, *Asparagus officinalis* storage 4121.
- compatibility, *Bacillus thuringiensis*, pest control, *Ephestia cautella*, *Plodia interpunctella*, stored products 7495.
- compatibility, *Bacillus thuringiensis*, pest control, *Ephestia cautella*, *Plodia interpunctella*, stored products 6351.
- disease control, leafspot, *Pestalotzia palmarum*, *Helminthosporium*, *Cocos nucifera* 1391.
- disease control, orchards, *Malus* 6874.
- disease control, *Rubus idaeus*, fungi 487.
- effects on seeds microflora, *Capsicum annuum* 5832.
- foliar applications, effects on rhizosphere microorganisms, *Cicer arietinum* 4254.
- prochloras, comparison treatment, *Momilina fructicola* infection, *Prunus persica* benomyl resistance 5719.
- resistance, *Botrytis cinerea* 1531.
- seed treatment, *Lolium perenne* yield 5847.
- use, leafspot disease control, *Dioscorea dumetorum* 5061.

Captaphol,

- use, leafspot disease control, *Dioscorea dumetorum* 5061.

Carabidae,

- habitat selection, role olfactory stimuli, soil microorganisms 9532

Carbadox,

- drug resistance, R factors, host range, *Escherichia coli*, animal isolates 7038.

Carbamate kinase,

- Pseudomonas aeruginosa*, purification, function, regulation 37.

Carbapenem,

- derivatives, in vitro, antibacterial activity, *Proteus vulgaris*, *Citrobacter freundii* 1650.
- derivatives, production, *Streptomyces*, isolation, physicochemical properties 649.

Carbapenem RS-533,

- synthesis, antimicrobial activity 9793.

Carbapenems,

- antibacterial activity 2506.
- antibacterial activity, *Pseudomonas aeruginosa*, in vitro, in vivo 6216.
- chemical modification 6215.
- thin-layer chromatography 9712.

Carbaryl,

- biodegradation, nitrifying bacteria, inhibition nitrification 1063.
- inhibition, nitrification, *Pseudomonas*, *Nitrosomonas*, *Nitrobacter* 7007.
- pesticide residues, soil microorganisms biodegradation, nutrient requirements, flooded soils 9620.

Carbazole,

- derivatives, antibacterial activity, antifungal activity, *Escherichia coli*, *Staphylococcus aureus*, *Candida albicans*, *Aspergillus niger* 7961.

Carbazomycin A,

- Streptovorticillum ehimensis*, biosynthesis 8906.

Carbendazim,

- disease control, big vein disease, lettuce big vein virus, *Lactuca sativa* 6889.
- disease control, *Gaeumannomyces graminis* var. *tritici*, take-all, *Triticum aestivum* 507.
- disease control, white rot, *Coriulus versicolor*, pruning wounds, *Malus pumila* 6873.
- effects on seeds microflora, *Capsicum annuum* 5832.
- soil amendment, effects on soil microorganisms 2379.
- specificity, cell cycle, *Schizosaccharomyces pombe* 690.

Carbenicillin,

- active site, detection, characterization 2548.
- +aminoglycoside antibiotics, antibacterial activity, *Pseudomonas aeruginosa* 1619.
- antibacterial activity, *Pseudomonas* 744.
- antibacterial activity, *Pseudomonas aeruginosa* 6128.
- antibacterial activity, *Pseudomonas aeruginosa*, N-acetyl cysteine effects on 5281.
- antibiotic resistance, Enterobacteriaceae, *Pseudomonas* 2393.
- antibiotic resistance, *Pseudomonas aeruginosa* 7023.
- antibiotic resistance, *Pseudomonas aeruginosa*, β -lactam antibiotics antibacterial activity 740.
- antibiotic sensitivity testing, bacteria 6111.
- antibiotic sensitivity testing, gram-negative bacilli 8001.
- antibiotic sensitivity testing, *Pseudomonas aeruginosa* 1600.
- antibiotic synergism, amikacin: gentamicin, antibacterial activity, *Pseudomonas aeruginosa* 755.
- antibiotic synergism, tobramycin: gentamicin, antibacterial activity, *Proteus*, *Pseudomonas aeruginosa* 7967.
- bacteria antibiotic sensitivity testing 7984.
- +ethionium, antibacterial activity, *Pseudomonas aeruginosa*, clinical isolates 2523.
- +gentamicin, antibiotic synergism, antiviral activity, *Pseudomonas aeruginosa* 7123.
- + β -lactam antibiotics antibacterial activity 3314.
- +midacymycin, antibiotic synergism, antibacterial activity, *Pseudomonas aeruginosa* 1669.
- resistance, population studies, *Escherichia coli*, Enterobacteriaceae 629.
- Salmonella* clinical isolates, antibiotic sensitivity testing 6112.

[1-Carboxethoxymethyl]-O-alkylisourea [copper(II)],

- derivatives, antifungal activity, curvularia, *Aspergillus niger*, *Fusarium*, Alternaria solani 5205.

Carboxylic 3-deazadenosine,

- effects on rhadovirus replication 6068.

Carbouluran,

- effects on, rhizosphere microorganisms, *Rhizoctonia solani*, *Verticillium albo-atrum*, wilt, *Solanum tuberosum* 1512.
- paddy fields soil, effects on nitrogen fixation, heterotrophic bacteria 619.
- pesticide applications, pesticide residues, soil characteristics, effects on soil microorganisms 8705.
- pesticide applications, soil, disease transmission, maize chlorotic dwarf virus, maize dwarf mosaic virus, vectors, *Graminella nigrifrons*, *Rhopalosiphum maidis* 7738.

Carbohydrate composition,

- Agrobacterium radiobacter, Polysaccharides 7710.
- Allium cepa, white rot, *Sclerotium cepivorum* 5760.
- antitumor agents, *Leishman* eodides 1963.
- carminocins, spatial distribution 1657.
- extracellular polymers, *Pseudomonas*, Azotobacter, Achromobacter 1958.
- extracellular polysaccharides, *Streptococcus mutans*, *Streptococcus sanguis* 8324.
- Haemophilus influenzae polysaccharides, N.M.R. 7438.
- Hansenula polymorpha, association, carbon dioxide recycling, nutrient requirements, relationship, space flight, food, man 8486.
- Hordeum vulgare, association, disease resistance, powdery mildew 6857.
- Hyphomicrobium, extracellular polymers, polysaccharides 3710.
- Ippopolysaccharides, bacteroids, *Rhizobium lupini* 9188.
- Ippopolysaccharides, *Pseudomonas* 9597.
- Ippopolysaccharides, structure, *Aeromonas hydrophila* 6577.
- Microleobiospora grisea polysaccharides, antitumor activity, Ehrlich ascites tumor, rats 6586.
- Penicillium funiculosum dextranase 7340.
- phosphorylation, correlation β -D-fructofuranosidase polymorphism, isoelectric focusing, *Saccharomyces cerevisiae* 65.
- polysaccharides, antitumor agents, Microleobiospora grisea 6587.
- polysaccharides biosynthesis, thermophilic bacteria 6573.
- polysaccharides, *Rhizobium meliloti* 6574.
- protease, *Bacillus mesentericus* 5522.
- Shigella dysenteriae, polysaccharides, immunochemistry 7439.
- sulfur polysaccharides, Arthrobacter 2818.

Carbohydrate metabolism,

- enzymes, purification, characterization, kinetics, books 5445.

Carbohydrate-degrading bacteria,

- rumen microorganisms, biodegradation, cotton, pretreatment, ozone, sodium hydroxide 1062.

Carbohydrates,

- antigens, Legionella, enzyme-linked immunosorbent assay 6307.
- composition, association, cellulose biodegradation, fungi 3767.
- conversion, ethanol production, *Saccharomyces* 4738.
- digestibility, animals, feeding trials, fungi, yeasts 3853.
- effects on cellulose digestion, rumen microorganisms pure culture 8425.
- effects on cellulose hydrolysis, cellulolytic microorganisms 7547.
- effects on fungi patulin antibacterial activity, *Streptococcus bovis* 273.
- Helianthus tuberosus, ethanol, role yeasts 2389.
- hydrolysis, α -D-glucosidase, fungi, bacteria 7431.
- levels, fruits, apple mosaic virus effects on, *Malus pumila* 8562.
- metabolism, lactic acid bacteria, reviews 9125.
- metabolism, leaves, *Cucumis sativus*, Sphaerotheca fuliginea infection, effects on 1273.
- metabolism pathways, tricarboxylic acid cycle, bacteria, enzymes 123.
- nutrient sources, liquid culture, growth, Beauveria bassiana, Metarhizium anisopliae 4535.
- Rhizobium lupini*, cell walls, chemical extraction, methodology 2700.
- straw, biodegradation, fungi 8442.

4-O-Carbomethoxylamellollic acid anhydride,

- Verticillium lamellollicola*, characterization 8378.

Carbomycin,

- effects on *Escherichia coli* aminocyl-tRNA hydrolase, dissociation, ribosomes

Carbon,

- association, bacteria growth, water treatment 8069.
- biodegradation, soils (volcanic), soil microorganisms 159.
- compounds exudates, *Sorghum bicolor* seedlings roots, nitrogen-fixing bacteria inoculation 4243.
- deficiency, association, *Aspergillus candidus* extracellular proteolytic enzymes biosynthesis 1933.
- flux, association, nitrogen fixation, Leguminosae 5938.
- incorporation, soil, plants lignin biodegradation 5539.
- limitations, Kleocera growth, assimilation enzymes biosynthesis, methanol concentration 6552.
- mineralization, tillage, effects on, soil properties, microorganisms, biomass 2359.
- nutrient dynamics, *Rhizobium*, hydrogen production, *Vigna unguiculata* 4247.
- +phosphorus bonds, *Streptomyces hygroscopicus* bialaphos biosynthesis 2824.
- production, leaf litter decomposition, bacteria, *Fagus sylvatica*, coniferale, association, climate 2021.
- soil amendment, effects on enzymes activity, soil microorganisms 5927.
- source, activated sludge denitrification kinetics 5298.
- translocation, *Hordeum*, brown rot 6769.
- uptake, *Allium porrum*, *Glomus mosseae* symbiosis 1471.
- utilization, *Rhizobium* isolates, *Cajanus cajan*, *Cicer arietinum* 7821.

Carbon (activated),

- novobion adsorption, association purification 6230.

Carbon dioxide,

- association, methodology, detection, *Neisseria gonorrhoeae* 2693.
- atmospheric conditions, effects on, methanogenic bacteria, methanogenesis 871.
- climatic change, pollution effects, nutrient cycles, soil microorganisms 9563.
- concentration, effects on *Rhizobium meliloti* nitrogen fixation, nodulation, Medicago sativa 9586.
- conversion, *Chlorobium limicola* f.sp. *thiosulfatophilum* 2894.
- detection, bacteria food contamination, I.R. radiation use 4851.
- effects on erythromycin antibacterial activity 3420.
- effects on growth, ethanol fermentation, yeasts 141.
- effects on heart rot, sap rot, wood decay 5084.
- effects on methanogenesis, methanogenic bacteria 3259.
- effects on *Staphylococcus aureus* micrococcal endonuclease biosynthesis 9182.
- effects on toxins biosynthesis, *Clostridium botulinum* 5668.
- enrichment effects on *Rhizobium japonicum*, nitrogen fixation, *Glycine max* 4248.
- evolution, *Candida intermedia*, fermentation 128.
- formation, 2,4-D, degradation, mineralization, bacteria, soil 5909.
- gas production, gas chromatography, fungi, decomposition, wood, *Fagus sylvatica* 9530.
- gas production, Japan soil, temperature, dissolved organic carbon, effects on 8668.
- inhibition ethanol production, yeasts, immobilized cells 8397.
- inhibition, *Pseudomonas fluorescens*, association meat packaging, spoilage 761.
- levels, effects on Bacteroides corrodens, antibiotic sensitivity testing 2507.
- levels, storage conditions, *Pseudomonas marginalis* soft rot, post-harvest decay

- iron dioxide, (continued)**
tomatoes 9453.
levels, vertical distribution, iron-oxidizing bacteria, reclaimed land, coal mines 9561.
monitoring, fermentors, computer applications 5361.
packaged food, cold storage, poultry, lactic acid bacteria spoilage 6686.
packaging, Enterobacteriaceae, Lactobacillus, spoilage, meal 4879.
packaging, potatoes, spoilage, psychrophilic bacteria 4883.
production, Corynebacterium, relationship, glutamic acid fermentation association growth 5381.
production, relationship *Zymomonas mobilis* ultrastructure, glucose utilization 5567.
production, temperature, humidity, effects on, soil microorganisms 577.
recycling, Hansenula polymorpha carboxydic acid composition association, nutrient requirements, relationship, space flight, food, man 4846.
release, soil, relationship, microorganisms biomass measurement 1969.
role, acetyl CoA biosynthesis, Methanobacterium thermoautotrophicum 7414.
spore germination, Verticillium dahliae 6968.
storage conditions, fishery products, effects on, *Pseudomonas*, Moraxella, Lactobacillus 6498.
storage conditions, seafood, effects on spoilage 2921.
storage, disease control, post-harvest decay, blueberries, fungi infection 3106.
Thermochromyces vulgaris spore germination methodology 5384.
iron dioxide fixation,
interaction nitrogen fixation, Glycine max 4236.
iron disulfide,
emulsions, effects on nitrifying bacteria 9553.
inhibition, nitrification, ammonification, soil microorganisms 9624.
iron monoxide,
binding cytochrome c multiple forms, purification, characterization, Nitrosomonas europaea 5479.
cytochrome C551 binding kinetics, *Pseudomonas aeruginosa* 4556.
oxidation, bacteria, air pollution 9795.
reaction hydroxylamine oxidase heme P-450, mechanisms, Nitrosomonas europaea 8282.
iron monoxide dehydrogenase,
purification, characterization, Acetobacter woodii, companion, Clostridium thermoaceticum 8282.
purification, characterization, Clostridium thermoaceticum 2769.
iron sources,
Azospirillum, Enterobacter, Klebsiella, Pseudomonas, factors affecting acetylene reduction 4244.
competition, Lullium perenne, vesicular-arbuscular mycorrhizas, Gigaspora maritima 564.
ectomycorrhizas, absorption, nutrient transport, trees 9505.
effects on Acremonium chrysogenum, cephalosporin C, proteinase, biosynthesis 6140.
effects on biochemical oxygen demand determination 9802.
effects on, biosynthesis, triacylglycerol lipase, Geotrichum candidum 102.
effects on, Kluyveromyces fragilis, inulinase production, continuous culture 2813.
effects on Nocardia fructifer biosynthesis, ristomycin, proteinase, pigments 2590.
effects on Rhodotorula gracilis lipids biosynthesis 7464.
effects on secretion, polymethyl galacturonase, polygalacturonase, polygalacturonase trans-eliminase, Xanthomonas campestris 5508.
effects on Trichoderma longibrachiatum, cellulase, endo-1,3- β -D-xylanase, polygalacturonase, production 3678.
effects on valine production, Micrococcus varians 7286.
fungi, phosphate solubilization, soil 9533.
fungi, respiration, fermentation heat 145.
gelatin hydrolysis, proteinase, Aspergillus sojae 8309.
Geotrichum candidum, triacylglycerol lipase production 7320.
glucose + molasses, Saccharomyces cerevisiae production 3806.
hydrocarbons, Arthrobacter simplex single-cell protein, nutritive value, rats 7597.
industrial wastes, denitrification, denitrifying bacteria 3473.
metabolism, activated sludge, mathematical models 5303.
metabolism, yeasts, soil isolates 5897.
oil cake, Bacillus licheniformis, α -amylase production 1850.
photosynthesis, competition, Claviceps purpurea sclerotia, infection, Secale cereale seeds 374.
photosynthesis, Glycine max, energy budget, utilization, Rhizobium, nitrogen fixation 9603.
soil bacteria, seeds germination exudates 551.
soil denitrification, relationship 613.
Spirulina maxima, use digestion (anaerobic), methanogenesis 625.
Vicia faba, photosynthesis, utilization, mycorrhizas, Rhizobium, nodulation, nitrogen fixation 615.
yeasts, effects on citric acid biosynthesis 7309.
iron-14,
incorporation, Micromonospora chloacea tetracarbin biosynthesis 8905.
labelling, soil microorganisms biomass, degradation 2339.
ironstone dehydratase,
sulfonamides, inhibition, bacteria, reviews 8756.
ironstone beverages,
contamination, Clostridium thermoaceticum, Desulfotomaculum nigrificans 8457.
ironolate,
treatment, pythium infection, Gramineae 4114.
ironyl sulfide,
cheese flavor, ripening, Cheddar cheese 9272.
ironxamides,
effects on, growth, sclerotia, formation, Sclerotium rolfsii 4302.
ironxin,
antifungal activity, Choanephora cucurbitarum 4004.
antifungal activity, Rhizoctonia solani, infection, Gossypium 4122.
bioxy-5,6,7,8-tetrahydromethanopterin, Nocardia 4763.
resistance, yeasts 7908.
Carboxy-pregna-1,4-dien-3-one,
Corynebacterium, production, cholesterol conversion 120.
Carboxy-2,4-diphenyl-but-2-enoic anhydride,
Aspergillus nidulans, structure, activity 8539.
Carboxy-5,6,7,8-tetrahydromethanopterin,
structure relationship, methanopterin, Methanobacterium thermoautotrophicum 4577.
Carboxylesterase,
Saccharomyces cerevisiae, role, esters equilibrium, relationship, sugars
- Carboxylesterase, (continued)**
fermentation 2860.
Carboxymethylcellulose,
stimulation Trichoderma pseudokoningii biosynthesis, β -D-glucosidase, exo-1,3- β -glucanase 7423.
Carboxymethylhydroxyiminoic semialdehyde dehydrogenase,
purification, characterization, Escherichia coli 53.
Carboxypeptidase A,
purification, characterization, Aspergillus fumigatus 940.
Carbozomycin B,
Streptovorticillium ehimensae, biosynthesis 8906.
Carcases,
animals, meat, food contamination, Campylobacter fetus subsp. jejuni 1090.
bacteria contamination, sampling methodology 2028.
beef, chilling effects on bacteria enumeration 8476.
beef, cleaning systems, sanitation 808.
cattle, bacteria contamination, swabs enumeration methodology 5404.
cattle, pigs, bacteria food contamination, Norway 5618.
chickens, food contamination, Campylobacter fetus subsp. jejuni 1082.
chickens, food contamination, Enterobacteriaceae, Salmonella, radiation, temperature, effects on 4786.
chickens, food contamination, Salmonella, detection methodology 1077.
chickens, incidence Salmonella 195.
pigs, abscesses, bacteria isolation, characterization 5619.
poultry, serotypes, Salmonella contamination 8485.
sheep, goats, chlorine washing 6684.
Carcinogenesis,
aflatoxin B1, liver, rats, proteins nutrition effect on 4902.
Carcinogenicity testing,
single-cell protein, Basidiomycetes, animal models 9113.
use, bacteria, yeasts, methodology 4465.
Carex,
plant debris, biodegradation, microorganisms, acids effects on, lakes, polar environments 1995.
plant debris, biodegradation, USA, Alaska, lakes, nutrient enrichment effects on 2023.
Carica,
fruits, post-harvest decay, storage, Phoma exigua, Colletotrichum acutatum 7719.
Carica papaya,
anthracnose, Colletotrichum gloeosporioides, cutinase, activity, pesticides (organophosphorus), effects on 8563.
anthracnose, Colletotrichum gloeosporioides, pathogenesis, electron microscopy 8564.
canker, Phytophthora palmivora, disease control, maneb, chlorothalonil 5058.
Erwinia carter, symptoms, Acothia fulva vectors, Maranta lindsaea 1222.
latent infection, Colletotrichum gloeosporioides, pathology 6788.
pathogenicity, Rhizoctonia solani 1218.
root rot disease resistance, genetic analysis 1343.
root rot, Phytophthora palmivora, disease control 1213.
USA, Florida, viruses incidence, distribution 5020.
Carlavirus,
antigenic relationship, enzyme-linked immunosorbent assay, association F(ab')₂ 3529.
infection, Impatiens holstii 6792.
purification, characterization, Taraxacum officinale isolates, plants infection 416.
purification, physicochemical properties, infection, Solanum melongena, host range 408.
Carminomycin,
Actinomadura antibiotic sensitivity testing 6109.
derivatives production, toxicity, antitumor activity 7166.
derivatives, synthesis, antibacterial activity, Bacteroides mycoides 2592.
N-monoethyl derivatives, characterization, antibacterial activity, Mycoplasma mycoides 781.
titer preparation methodology 6231.
carbohydrate composition, spatial distribution 1657.
Carnation etched ring virus,
enzyme-linked immunosorbent assay, surveys, Dianthus caryophyllus 1294.
Carnation latent virus,
infection, Dianthus caryophyllus, indicator species, Chenopodium murale 6806.
Carnation mottle virus,
detection, enzyme-linked immunosorbent assay, Dianthus caryophyllus 831.
enzyme-linked immunosorbent assay, surveys, Dianthus caryophyllus 1294.
meristem tip culture, enzyme-linked immunosorbent assay detection, Dianthus caryophyllus 7223.
Carnation necrotic fleck virus,
enzyme-linked immunosorbent assay, surveys, Dianthus caryophyllus 1294.
infection, double-stranded RNA isolation, plants 2981.
Carnation ringspot virus,
detection, enzyme-linked immunosorbent assay, Dianthus caryophyllus 831.
enzyme-linked immunosorbent assay, surveys, Dianthus caryophyllus 1294.
virions aggregation, immunoelectrophoresis 3543.
Carnitine acetyltransferase,
purification, Candida tropicalis 2781.
 β -Carotene,
biosynthesis, Blakeslea trispora fermentation, cellobiose media (culture) 104.
Carotenoids,
biosynthesis, Azospirillum brasilense continuous culture, oxygen tension effects on 2749.
biosynthesis, Micrococcus luteus membranes 2839.
formation, Protaminobacter ruber 6624.
Protaminobacter ruber, purification, characterization 6621.
Carotenoproteins,
spilloxanthin configurations, Raman spectroscopy, Rhodospirillum rubrum 6625.
Carotovorcin,
effects on, macromolecules, biosynthesis, nutrient transport, ATP, Erwinia carotovora 2589.
Carpetimycin C,
biosynthesis, isolation, physicochemical properties 9759.
Carpetimycin D,
biosynthesis, isolation, physicochemical properties 9759.
Carpinus betulus,
sap, interference biological control, bacteria, Insecta 2831.
Carrageenans,
Brevibacterium flavum immobilized cells, fumarate hydratase activity 7343.

Subject Index

Carrageenans, (continued)

gels, fumarate hydratase stability. *Brevibacterium flavum* immobilized cells 7344
use, immobilization. *Brevibacterium flavum*, association, malic acid production,
fumarate hydratase activity 4494.
use, immobilized enzymes, fumarase, *Brevibacterium flavum* 6472.

Carrots,

washing effects on microorganisms 5613.

Cartap,

soil microorganisms, effects on 3248.

Carthamus tinctoria,

turp mosaic virus 1295.
yield, *Alternaria carthami* infection effects on 1250.

Carya illinoensis,

crown gall, *Agrobacterium*, pathogens characterization, biological control, use,
Agrobacterium radiobacter, USA, Georgia 3971
pecans yield effects on *Aspergillus parasiticus* aflatoxins accumulation 3871.
scab, *Cladosporium carigenum*, effects on nuts drr 6929
scab, *Cladosporium carigenum*, factors affecting spores release 397
scab, *Fusicladium effusum* infection, factors affecting disease spread 1202.

Carya illinoensis,

scab, *Cladosporium carigenum*, disease control, propiconazole, foliar application
9496.

Casein,

media methodology, *Streptococcus lactic acid* fermentation 5426
milk-clotting enzymes proteolysis, *Mucor racemosus* 7357.
proteolysis, lactic acid bacteria 4800.

β -Casein,

biodegradation; *Escherichia coli*, *Pseudomonas fluorescens* 2020

Casein hydrolyzate,

media methodology, *Streptococcus lactic acid* fermentation 5426.

Catalytic enzymes,

effects on, bacteria growth, crop residues digestion, forage quality 4860.

Cassava,

fermentation, *Corynebacterium manihoti*, linamarin synthase activity 3847.
fermentation, detoxification, linamarase, *Aspergillus sydowi*, *Penicillium stecklii*
4778.

Cassava common mosaic virus,

disease transmission, host range, *Manihot esculenta* 1232
elimination germplasm, disease control, *Manihot esculenta* 1375
infection, leaves, yield, *Manihot esculenta* 407.
mosaic disease, *Manihot esculenta*, heat treatments 1312.

Cassava latent virus,

mosaic disease, *Manihot esculenta*, etiology, pathogenesis 9413
mosaic disease, *Manihot esculenta*, transmission, *Nicotiana benthamiana*, tissues
ultrastructure 1315.

Cassava mosaic virus,

yield reduction, *Manihot esculenta* 1314.

Cassia fistula,

extracts, antiviral agents, vaccinia virus 3343.

Cassia obtusifolia,

weed control, seedling blight, *Alternaria cassiae* 1286

Cassia occidentalis,

weed control, seedling blight, *Alternaria cassiae* 1286.

Castanea dentata,

blight, *Cryphonectria parasitica*, virulence, effects on, dieback 8655.
blight, *Endothia parasitica*, disease control, virulence, reviews 4165.
blight, *Endothia parasitica*, virulence, Greece 6916.
canker, *Endothia parasitica*, disease transmission, role, *Acarina*, USA, Virginia,
USA, West Virginia 6925.

Casuarina equisetifolia,

disease control, virulence, blight, *Endothia parasitica* 6922.

Casuarina equisetifolia,

disease resistance, blight, *Endothia parasitica*, virulence 8623.

Catabolism,

bile acids, *Pseudomonas*, *Actinomyces* 149.
glutic acid, *Pseudomonas testosteroni*, 2-pyrene-4,6-dicarboxylic acid
biosynthesis 1849.

Catabolite repression,

cellulase production, cyclic AMP levels, *Thermoplasma curvatum* 9179.
Cephalosporium acremonium, β -lactam antibiotics biosynthesis 5231.

Catalase,

activity, association, crop rotation, fertilization, soil, anaerobic bacteria,
soil 2382.
extraction, soil 4215.
immobilization, soil, factors affecting 4226.
kinetics, temperature effects on, soil 3200.

Catalase,

proteolytic enzymes effects on, soil 3201.
purification, characterization, *Aspergillus niger* 1863.
purification, physicochemical properties, *Proteus mirabilis* 3675.
Vibrio cholerae, activity, rifampicin antibiotic resistance 6018.

Catalysts,

fermentation, technology, immobilized enzymes, immobilized cells 7337.
microorganisms, steroids conversion 5530.

Catechol,

biodegradation, *Phanerochaete chrysosporium* 7544.

Catechol oxidase,

photoactivation, *Agaricus bisporus* 9178.
structure, spectroscopy, mechanisms, reviews, *Neurospora crassa* 6549.

Catechol 1,2-dioxygenase,

isolation, characterization, *Pseudomonas aeruginosa* 7392.
purification, kinetics, *Aspergillus niger* 3674.

Catechol 2,3-dioxygenase,

isolation, characterization, *Pseudomonas aeruginosa* 7392.

Catecholamines,

biodegradation, phenylalanine, bacteria 157.

Catecholamines,

derivatives, antiviral activity, influenza virus, chick embryos 9692.

Catharanthus roseus,

cuttings, rooting, mycoplasma-like organisms infection 1310.
leaf blight, *Fusarium oxysporum*, pathology 3094.
phytidyl, Mycoplasma-like organisms, disease transmission, *Deltocephalus*
flavicauda 7694.

roots, detection, mycoplasma-like organisms 3054.

Catheter,

bacteria infection, scanning electron microscopy 802.

Catheters,

colonization, *Staphylococcus*, growth 2638.

Staphylococcus, adherence 6271.

Cations,

complex, phosphorus containing, nitrogen containing, antibacterial activity 7921.
effects on *Erysiphe graminis* f.sp.hordei, haustoria growth, *Hordeum vulgare* 9347.
effects on glutamine synthetase kinetics, *Micrococcus glutamicus* 6511.
effects on protein H1 biosynthesis, *Pseudomonas aeruginosa* envelopes,
relationship, antibiotic resistance 5158.
interference dinitrosalicylic acid reducing sugars assays, media (culture) 8085.
leaching, fungi mycelia, leaf litter decomposition, *Collembola* grazing effects on
3212.
metals, effects on pectic esterase production, *Verticillium albo-atrum*,
Verticillium dahliae 7413.
surfaces binding, antimicrobial activity 3373.
uptake, mycorrhizas, roots, *Trifolium subterraneum* 559.

Cats,

coronavirus antibodies, detection, enzyme-linked immunosorbent assay 9849.

Cattle,

aflatoxins toxicity, reviews 283.
animal isolates, *Pasteurella*, drug resistance, antibiotic resistance, respiratory
tract diseases 7884.
animal isolates, *Streptococcus*, anaerobic bacteria, susceptibility, antibiotics 7987.
animal wastes, slurries, *Escherichia coli*, *Salmonella typhimurium*, survival,
isolation, drug resistance 2617
antibodies, *Leptospira interrogans* ser.hardjo, *Leptospira interrogans* ser.pomona,
enzyme-linked immunosorbent assay 8118.
bacteria infection, treatment, antibacterial agents, association, drug resistance
induction 3284.
Bordetella pertussis antibodies detection, radioimmunoassay 1789.
brucellosis, abattoirs, hygiene 8072
brucellosis, diagnosis, radioimmunoassay, complement fixation, indirect
hemagglutination 4485.
carcasses, bacteria contamination, swabs enumeration methodology 5404.
carcasses, bacteria food contamination, Norway 5618.
colostrum proteins, *Streptococcus lactis* fermentation effects on 246.
cow's milk, isolation, *Campylobacter fetus* subsp.jejuni 4799.
dairy products, aflatoxin M, food contamination 2938.
diagnosis, rinderpest virus, antigens, detection, fluorescent antibody test,
methodology 830.
dung, decomposition, rangelands 3198.
feces fermentation, anaerobic bacteria, hydrocarbons production 5138.
feeding regimes, *Gossypium hirsutum* seeds ammoniation effects on cow's milk
aflatoxin M1 2945.
feeding regimes, sewage sludge, microorganisms, food contamination, meat 4803
feeding trials, single-cell protein fatty acids, association cow's milk 250.
foot-and-mouth disease, milk samples enumeration 4767
grazing, environmental impact, surface water, water quality, streams, USA,
Colorado 8973.
isolates, *Enterobacteriaceae*, antibiotic sensitivity testing 6095.
isolates, *Escherichia coli*, R factors, drug resistance 7039.
isolates, *Escherichia coli*, toxins production 1112.
isolation, *Pasteurella haemolytica*, antibiotic resistance 8722.
juveniles, diarrhea isolates, *Escherichia coli*, antibiotic resistance 1534.
juveniles, *Enterobacteriaceae* infection, antibiotic resistance 643
juveniles, feeding, milk substitutes, *Escherichia coli* isolation, antibiotic
sensitivity testing 8742.
juveniles, Feeding trials, pasteurized milk, *Staphylococcus aureus* 4869.
juveniles, food sources, milk-colostrum, fermentation, lactic acid bacteria 7599.
liquids *Streptomyces* isolates: molasses, digestibility 4867.
liver abscesses *Fusobacterium necrophorum* isolates, antibiotic sensitivity
testing 7121.
mammary gland, bacteria infection, penicillin G+streptomycin treatment, isolates
susceptibility 8651.
manure, composts, enzymatic activity, microflora, association 8061.
mastitis, disease control, quaternary ammonium compounds, teat dips,
antibacterial activity 1728.
mastitis incidence, iodine teat dips 4462.
mastitis prophylaxis, udder hygiene 9820.
mastitis, *Streptococcus*, *Staphylococcus*, relationship udder hygiene 4453.
mastitis, udder hygiene 9819.
neonates, diarrhea, *Escherichia coli* isolation, antibiotic sensitivity testing
3283.
poisoning, *Baccharis cordifolia*, uptake, mycotoxins 2944.
rumen fluids, bacteria proteins determination methodology 5408.
rumen microorganisms, formaldehyde effects on proteins metabolism 4857.
rumen microorganisms, proteolytic bacteria, media (isolation) use
ribulosebiphosphate carboxylase 7243.
salmonellosis, abattoirs surveys, zoonoses, man 234.
serum albumin, *Haemophilus influenzae* polysaccharides conjugate, hydrodynamic
light scattering 8779.
silage feeds, factors affecting nutritive value 2927.
sterility, feeds contamination, fungi, mycotoxins 4890.
teat dips, prophylaxis, mastitis 8071.
teats, spore-forming bacteria, contamination sources, milk 4812.
teats washing, effects on bacteria contamination, milk 5350.
T-2 toxin metabolites structure 3894.
udder infectious disease, association, environmental conditions 6272.
udder microflora, contamination, milk 4820.
udder microflora, milk contamination, sanitation 5339.
udder preparation, relationship, bacteria milk contamination 4798.

Cattle,

mycorrhizas symbiosis, greenhouses 9562.

Cauliflower mosaic virus,

cytology, immunodiagnosis, *Brassica oleracea* var.acephala 4983.
infection, *Cruciferae* 3082.

Caulobacter crescentum,

methodology, assays, poly- β -hydroxybutyric acid, inorganic compounds,
phosphates 4498.

Caves,

calcium carbonate, bacteria, calcification 8711.
soil microorganisms 1486.

CDPdiacylglycerol-inositol 3-phosphatidyltransferase,

Saccharomyces cerevisiae, purification, characterization 3682.

notus velutinus,
rhizoids, nitrogen fixation, nodules, seasonal variations, diurnal variations, soil temperature effects on 9513.

velophora cecropia, antibacterial activity, *Escherichia coli* 1551

rus decodara,
seed germination, fungal flora inhibition, seed-borne diseases 9528.

actor,
antibacterial activity 2529.

antibacterial activity, *Haemophilus influenzae* type b, association, inoculum size 732.

antibacterial activity, in vitro 731.

antibiotic sensitivity testing 9746.

adroxil,
antibacterial activity 2529.

antibacterial activity, in vitro 731.

antibacterial activity 7137.

elaxine,
antibacterial activity comparison, gram-positive bacteria, gram-negative bacteria 8831.

loridine,
antibacterial activity comparison, gram-positive bacteria, gram-negative bacteria 8831.

alotin,
antibacterial activity, *Bacteroides fragilis* 8811.

anarodis,
antibacterial activity, *Bacteroides fragilis* 8811.

antibacterial activity comparison, gram-positive bacteria, gram-negative bacteria 8831.

antibacterial activity, gram-negative bacilli 7185.

antibacterial activity, gram-negative bacteria 1606.

antibacterial activity, gram-negative bacilli 4347.

antibacterial activity, *Streptococcus* group B 3409.

antibiotic sensitivity testing, bacteria 6111.

comparison, chloramphenicol, ampicillin, bactericidal activity, *Haemophilus influenzae* 3418.

β -lactam antibiotics antibacterial activity 3314.

sensitivity, *Staphylococcus epidermidis* 8828.

athlamidine,
gentamicin, antibacterial activity, *Streptococcus faecalis*, *Streptococcus faecium* 7982.

atrilzine,
antibacterial activity 2529.

azoln,
antibacterial activity, gram-negative bacteria 4347.

antibacterial activity, *Staphylococcus aureus*, *Staphylococcus epidermidis* 7995.

comparison, cefotetan antibacterial activity 6134.

Cocobacterium antibiotic sensitivity testing 7996.

antibacterial activity comparison, gram-positive bacteria, gram-negative bacteria 8831.

noxime,
anaerobic bacteria susceptibility 5194.

antibiotic sensitivity testing, anaerobic bacteria 7136.

comparison, cephalosporins, antibacterial activity, gram-negative bacteria 6137.

metazole,
antibacterial activity, gram-negative bacilli, gram-positive cocci 2541.

ezidine,
antibacterial activity 7142.

antibacterial activity, *Neisseria gonorrhoeae* 3401.

oncid,
antibacterial activity, *Staphylococcus aureus*, *Staphylococcus epidermidis* 7995.

disc-diffusion test 9742.

operzone,
amikacin, serum bactericidal activity, *Pseudomonas aeruginosa*, *Klebsiella pneumoniae* 3400.

aminoglycoside antibiotics, antibacterial activity, non-fermentative gram-negative bacteria 1607.

analogs, antibacterial activity, *Pseudomonas aeruginosa* 7993.

antibacterial activity 3399.

antibacterial activity 7140.

antibacterial activity 9674.

antibacterial activity, bacteria, clinical isolates 7146.

antibacterial activity, *Bacteroides fragilis* 7129.

antibacterial activity, *Enterobacter cloacae* 7144.

antibacterial activity, gram-negative bacilli 7983.

antibacterial activity, gram-negative bacteria 1606.

antibacterial activity, *Haemophilus influenzae*, inoculum size effects on 2532.

antibacterial activity, *Pseudomonas aeruginosa* 6128.

antibacterial activity, *Streptococcus pneumoniae* 727.

antibiotic resistance, *Staphylococcus aureus* 5160.

antibiotic sensitivity testing, antibacterial activity, antibiotic resistance, *Enterobacteriaceae* 5271.

antibiotic sensitivity testing, *Clostridium perfringens*, *Bacteroides fragilis*, *Bacteroides fragilis* subsp. *thetaiotaomicron* 9743.

antibiotic sensitivity testing, disc-diffusion test, statistical analysis 9744.

antibacterial activity, antibiotic sensitivity testing 7984.

ampylbacter fetus subsp. *jejunii* drug sensitivity testing 4292.

comparison aztreonam, antibacterial activity, gram-negative bacteria 8816.

mezlocillin, antibacterial activity, gram-negative bacilli, *Staphylococcus aureus* 6146.

piperacillin, antibiotic antagonism, gram-negative bacteria, *Staphylococcus*, *Enterobacteriaceae* 3387.

operzone A,
antibacterial activity, *Enterobacteriaceae* 7980.

rankide,
antibacterial activity, *Staphylococcus aureus*, *Staphylococcus epidermidis* 7995.

taxlime,
antibacterial activity 3399.

antibacterial activity 4365.

antibacterial activity, β -lactam bacteria, stability, β -lactamase, comparison N-formimidoyl thienamycin 729.

antibacterial activity, antibiotic synergism, 3-desacetylcefotaxime, *Proteus morgani*, *Pseudomonas acidovorans*, *Pseudomonas cepacia* 6117.

antibacterial activity, bacteria infection treatment, man 6124.

Cefotaxime, (continued)

antibacterial activity, *Bacteroides*, *Escherichia coli*, mixed culture 7999

antibacterial activity, *Bacteroides fragilis* 7129.

antibacterial activity, cefotetan comparison 4348.

antibacterial activity comparison, antimicrobial agents 6126.

antibacterial activity, conferences 6362.

antibacterial activity, *Escherichia coli*, *Streptococcus faecalis* 739.

antibacterial activity, gram-negative bacilli 7983.

antibacterial activity, gram-negative bacteria 1606.

antibacterial activity, *Haemophilus equigenitalis* 8834.

antibacterial activity, *Haemophilus influenzae*, gram-negative bacteria 6119.

antibacterial activity, *Haemophilus influenzae*, inoculum size effects on 2532.

antibacterial activity, *Pseudomonas aeruginosa* 6128.

antibacterial activity, *Pseudomonas aeruginosa*, agar diffusion test 728.

antibacterial activity, *Yersinia enterocolicula*, *Bacteroides* corrodens, *Streptococcus pneumoniae* 6089.

antibiotic resistance, reviews 5997.

antibiotic resistance, *Staphylococcus aureus* 5160.

antibiotic sensitivity testing, agar diffusion test 6120.

antibiotic sensitivity testing, anaerobic bacteria 7136.

antibiotic sensitivity testing, antibacterial activity, antibiotic resistance, *Enterobacteriaceae* 5271.

antibiotic sensitivity testing, *Neisseria gonorrhoeae* 5240.

antibiotic synergism, tobramycin, gentamicin, antibacterial activity, *Proteus*, *Pseudomonas aeruginosa* 7967.

bacteria antibiotic sensitivity testing 7984.

boassays 4385.

Campylobacter fetus, subsp. *jejunii*, drug sensitivity testing 4292.

comparison aztreonam, antibacterial activity, gram-negative bacteria 8816.

comparison, cefotetan antibacterial activity 6134.

comparison, ceftazidime antibacterial activity, *Pseudomonas* 6122.

comparison, moxalactam, antibacterial activity, *Enterobacteriaceae* 6125.

configurations, analogs, penetration, cell membranes 9751.

3-desacetylcefotaxime, antibacterial activity, antibiotic antagonism, antibiotic synergism 6118.

hydrolysis, β -lactamase, *Pseudomonas aeruginosa* 4355.

inactivation aminoglycoside antibiotics 6108.

β -lactamase, *Enterobacteriaceae*, association, cefotaxime, comparison, moxalactam, antibacterial activity 6125.

Mycobacterium antibiotic sensitivity testing 7996.

Neisseria gonorrhoeae, clinical isolates, antibiotic sensitivity testing 5242.

sensitivity, bacteria, urinary tract isolates 8813.

antibacterial activity, reviews 6116.

Cefotetan,
anaerobic bacteria susceptibility 5194.

antibacterial activity 4349.

antibacterial activity 4354.

antibacterial activity 4357.

antibacterial activity 4358.

antibacterial activity 5198.

antibacterial activity 7138.

antibacterial activity, β -lactamase susceptibility 4378.

antibacterial activity, anaerobic bacteria 4345.

antibacterial activity, bacteria 4340.

antibacterial activity, *Bacteroides*, *Haemophilus influenzae*, *Klebsiella* 4356.

antibacterial activity, body fluids, man 4377.

antibacterial activity, cefotaxime comparison 4348.

antibacterial activity comparison, β -lactam antibiotics 6134.

antibacterial activity, *Enterobacteriaceae* 4343.

antibacterial activity, *Enterobacteriaceae*, hydrolysis stability, β -lactamase 4339.

antibacterial activity, *Escherichia coli*, role β -lactamase 4370.

antibacterial activity, gram-negative bacteria 2526.

antibacterial activity, gram-negative bacteria 4350.

antibacterial activity, *Klebsiella*, β -lactamase stability 4363.

antibacterial activity, *Serratia*, *Enterobacter* 4341.

antibiotic sensitivity testing, bacteria 4352.

antibiotic sensitivity testing, *Bacteroides* 4346.

antibiotic sensitivity testing, clinical isolates, bacteria 737.

antibiotic sensitivity testing, gram-negative bacilli, gentamicin resistance 4342.

binding penicillin-binding protein, role antibacterial activity, gram-negative bacteria, gram-positive bacteria 4373.

inactivation β -lactamase, *Klebsiella oxytoca*, *Proteus vulgaris*, *Escherichia coli* 4368.

stability, β -lactamase hydrolysis 4368.

stability, β -lactamase hydrolysis, antibacterial activity, gram-negative bacteria, gram-positive bacteria 4364.

synthesis 4359.

Cefotiam,
antibacterial activity 2527.

antibacterial activity, bacteria infection treatment, animal models 6129.

Cefoxitin,
antagonism cephalosporins, β -lactamase induction, *Aeromonas hydrophila*, *Serratia marcescens* 7059.

antibacterial activity, β -lactam bacteria, stability, β -lactamase, comparison N-formimidoyl thienamycin 729.

antibacterial activity, *Bacteroides fragilis* 7129.

antibacterial activity, *Bacteroides fragilis* 8811.

antibacterial activity, gram-negative bacteria 1606.

antibacterial activity, gram-negative bacteria 4347.

antibacterial activity, *Haemophilus influenzae*, inoculum size effects on 2532.

antibacterial activity, macromolecules biosynthesis, *Streptococcus mutans*, *Streptococcus sanguis* 7135.

antibiotic sensitivity testing, anaerobic bacteria 7136.

antibacterial activity, antibiotic sensitivity testing 7984.

Bacteroides fragilis antibiotic sensitivity testing 7130.

\pm cefsulodin, antibacterial activity, anaerobic bacteria 6127.

comparison aztreonam, antibacterial activity, gram-negative bacteria 8816.

comparison, cefmetoxime, cefotetan, N-formimidoyl thienamycin, anaerobic bacteria susceptibility 5194.

comparison *Haemophilus influenzae*, temocillin antibacterial activity 6155.

comparison N-formimidoyl thienamycin, antibacterial activity, bacteria clinical isolates 7076.

+ N-formimidoyl thienamycin, antibiotic synergism, *Pseudomonas aeruginosa*,

Subject Index

Cefoxitin, (continued)

- Klebsiella pneumoniae 3394.
- induction β -lactamase, bacteria, comparison moxalactam 5273.
- + β -lactam antibiotics antibacterial activity 3314.
- penicillins antibiotic antagonism, antibacterial activity, Enterobacteriaceae, Pseudomonas 2533.
- sensitivity, *Staphylococcus epidermidis* 8828.
- suicide inhibitors, β -lactamase, gram-negative bacteria 2810.

Cefuroxime

- + aminoglycoside antibiotics, antibacterial activity, non-fermentative gram-negative bacteria 1607.
- analogs, antibacterial activity, *Pseudomonas aeruginosa* 7993.
- antibacterial activity, gram-negative bacilli 7983.
- antibacterial activity, *Pseudomonas aeruginosa* 6128.
- antibacterial activity, *Pseudomonas aeruginosa*, agar diffusion test 728.
- + cefoxitin, antibacterial activity, anaerobic bacteria 6127.
- effects on *Pseudomonas aeruginosa* morphology 9752.
- hydrolysis, β -lactamase, *Pseudomonas aeruginosa* 4355.
- + ticarcillin, + mezlocillin, + aminoglycoside antibiotics, antibacterial activity, *Pseudomonas aeruginosa*, *Serratia marcescens* 6093.

Ceftazidime

- + amikacin, serum bactericidal activity, *Pseudomonas aeruginosa*, Klebsiella pneumoniae 3400.
- analogs, antibacterial activity, *Pseudomonas aeruginosa* 7993.
- antibacterial activity 4365.
- antibacterial activity, *Acinetobacter calcoaceticus* subsp. anitratus, *Acinetobacter calcoaceticus* subsp. lawii 7973.
- antibacterial activity, affinity bacteria penicillin-binding protein 8835.
- antibacterial activity, Enterobacteriaceae, *Pseudomonas aeruginosa*, *Neisseria*, *Haemophilus influenzae*, *Bacteroides fragilis* 4367.
- antibacterial activity, gram-negative bacilli 7983.
- antibacterial activity, gram-negative bacteria 4362.
- antibacterial activity, *Haemophilus influenzae* 4353.
- antibacterial activity, pharmacokinetics 5243.
- antibacterial activity, *Pseudomonas* 6122.
- antibacterial activity, *Pseudomonas aeruginosa* 4374.
- antibacterial activity, *Pseudomonas aeruginosa* 9747.
- antibacterial activity, *Pseudomonas*, Enterobacteriaceae 4344.
- antibacterial activity, *Pseudomonas*, Enterobacteriaceae 6121.
- antibacterial activity, *Neisseria gonorrhoeae* 3401.
- antibiotic sensitivity testing, agar diffusion test, *Escherichia coli*, *Staphylococcus aureus*, *Pseudomonas aeruginosa* 4371.
- comparison, ceftolatan antibacterial activity 6134.
- determination, high-pressure liquid chromatography methodology, body fluids, man 8841.

Ceftiozime

- antibacterial activity, β -lactamase stability 2536.
- antibacterial activity, *Acinetobacter calcoaceticus* subsp. anitratus, *Acinetobacter calcoaceticus* subsp. lawii 7979.
- antibacterial activity, anaerobic bacteria 2535.
- antibacterial activity, gram-negative bacilli 7983.
- antibacterial activity, gram-negative bacteria 4362.
- antibacterial activity, *Serratia marcescens*, gram negative bacilli 2528.
- antibiotic synergism, aminoglycoside antibiotics, cephalosporins, gram-negative bacilli, *Staphylococcus* 2531.
- antibiotic synergism, tobramycin, antibacterial activity, *Pseudomonas aeruginosa* 2534.
- gentamicin, antibiotic synergism, antibacterial activity, gram-negative bacteria isolates 2539.
- Mycobacterium antibiotic sensitivity testing 7996.
- Neisseria gonorrhoeae*, clinical isolates, antibiotic sensitivity testing 5242.
- penicillins antibiotic antagonism, antibacterial activity, Enterobacteriaceae, *Pseudomonas* 2533.

Ceftriaxone

- + 6-acetyl-methylenepenicillanic acid, antibacterial activity, *Bacteroides fragilis* 3405.
- + aminoglycoside antibiotics, antibiotic synergism, antibiotic antagonism, *Pseudomonas aeruginosa* 7986.
- antibacterial activity, *Acinetobacter calcoaceticus* subsp. anitratus, *Acinetobacter calcoaceticus* subsp. lawii 7979.
- antibacterial activity, gram-negative bacteria 4362.
- antibacterial activity, *Haemophilus influenzae* 2511.
- antibacterial activity, *Haemophilus influenzae* 7981.
- antibacterial activity, disc-diffusion test 7998.
- antibiotic sensitivity testing, anaerobic bacteria 7136.
- inhibition, *Citrobacter freundii* β -lactamase 3397.
- Neisseria gonorrhoeae*, clinical isolates, antibiotic sensitivity testing 5242.

Cefuroxim

- antibacterial activity 1612.
- antibacterial activity, gram-negative bacteria 4347.

Cefuroxime

- antibacterial activity comparison, gram-positive bacteria, gram-negative bacteria 8831.
- antibacterial activity, *Escherichia coli*, Klebsiella 6130.
- antibacterial activity, gram-negative bacteria 1606.
- antibiotic resistance, *Escherichia coli* isolates 7893.
- antibiotic sensitivity testing methodology comparison 6090.
- antibiotic sensitivity testing, *Neisseria gonorrhoeae* 5240.
- bacteria antibiotic sensitivity testing 7894.
- comparison aztreonam, antibacterial activity, gram-negative bacteria 8816.

Cell adhesion

- Acinetobacter calcoaceticus*, biomass, monitoring, methodology, hexadecane, fermentation 5142.
- Agrobacterium tumefaciens, initiation, crown gall, *Helianthus* 3060.
- bracta, polystyrene substrates, measuring techniques, use, bioluminescence 4489.
- Neisseria meningitidis*, antimicrobial agents, effects on 6106.

Cell agglutination

- Legionella pneumophila, detection, Legionnaire's disease, man, methodology 3588.
- Pseudomonas phaseolicola*, *Phaseolus vulgaris* plant extracts, role, pathogenesis 8540.

Cell aggregation

- assays, bacteria, association, labelling, use, palmitic acid 7245.
- waste water treatment, aquatic microorganisms, role extracellular polymers 8059.
- yeasts, flocculation, assays 7263.

Cell culture

- assays, herpes simplex virus, methodology 3539.
- bacteria, dilution, automated methods 3600.
- bacteria, sampling, statistical analysis, species diversity measurements methodology 870.
- bacteria, urine, preservation methodology 3618.
- Escherichia coli*, quinoxaline derivatives, antibacterial activity 673.
- fibroblasts, prostaglandins, inhibition, vaccinia virus, replication 2485.
- methanogenic bacteria, methodology, anaerobic conditions 3549.
- Rhizobium japonicum*, infectivity, Glycine max, age effects on 2112.
- Staphylococcus aureus*, media (selective), temperature relationship 2661.
- Streptomyces hygroscopicus*, mathematical models, identification, growth curves 3590.

Cell cycle

- analysis methodology, relationship, growth rate, *Escherichia coli* 3559.
- Haemophilus influenzae*, comparison, *Escherichia coli*, chloramphenicol, bactericidal activity 5259.
- specificity, antimicrobial agents, *Schizosaccharomyces pombe* 690.

Cell death

- Pseudomonas aeruginosa*, soil, characterization 2353.
- Saccharomyces cerevisiae*, role sulfur dioxide 1563.

Cell disruption

- microorganisms, methodology glass beads 6337.
- Pseudomonas putida*, alkane 1-monoxygenase isolation, n-alkanes oxidation 5507.

Cell distribution

- yeasts, methodology 2724.

Cell division

- Escherichia coli*, association, growth, murein biosynthesis, cross-linking 1984.
- Mycobacterium* strains, inhibition, mellicillin 752.
- temperature-sensitive mutant, *Escherichia coli*, penicillins effects on inorganic pyrophosphatase levels 8000.

Cell fusion

- BSC-1 cells, role, herpes simplex virus 2 mutants 3271.
- protoplasts, *Streptomyces hygroscopicus*, biolaphos, biosynthesis 9781.
- Staphylococcus aureus* L form, recombinants, antibiotic resistance 3286.

Cell injury

- bacteria, association, novobiocin, coumestrol 5280.

Cell membranes

- adenosinetriphosphatase N,N'-dicyclohexylcarbodiimide binding subunits, purification, characterization, *Bacillus subtilis* 2833.
- alcohol dehydrogenase, purification, kinetics, mechanisms, *Pseudomonas aeruginosa* 7406.
- association, mechanisms, compound 48/80 antimicrobial activity 5225.
- cytochrome c-551, cytochrome c-555, purification, characterization, *Pseudomonas aeruginosa* 1828.
- DNA-binding protein, purification, characterization, *Bacillus subtilis* 9121.
- Escherichia coli*, *Salmonella typhimurium*, porins, β -lactam antibiotics 718.
- Mycoplasma gallisepticum*, purification methodology 3554.
- NADH dehydrogenase isoenzymes, isolation, characterization, *Micrococcus luteus* 7348.
- Nicotiana tabacum, peroxidation, *Cercospora nicotianae* cercosporin role 9442.
- oxaloacetate decarboxylase, purification, characterization, Klebsiella aerogenes 7406.
- penetration, ceftiozime, configurations, analogs 9751.
- polysaccharides, microorganisms, uronic acid bioassays 5365.
- Veillonella alcalescens*, methylmalonyl-CoA decarboxylase purification, characterization 7347.

Cell permeability

- trimethoprim drug resistance 5999.

Cell recognition

- host plants, *Rhizobiaceae*, association, plasmids, host range 5937.

Cell size

- measuring techniques, Coulter nano-sizer, viruses, bacteria, fungi 2646.

Cell surface

- Aeromonas salmonicida*, membrane proteins, purification, physicochemical properties 7290.
- detection L-cysteic acid, methionine sulfoxide, β -alanine, dihydroxy, α -aminobutyric acid, *Staphylococcus aureus* 1834.
- Saccharomyces cerevisiae*, antigens, antigenic determinants, physicochemical properties 6385.

Cell suspensions

- Escherichia coli*, β -adrenergic blocking agents effects on turbidity 2442.

Cell volume

- phototrophic bacteria, measuring techniques 5388.

Cell walls

- Absidia cylindrospora*, *Mucor mucedo*, *Rhizopus nigricans*, glucuronans, physicochemical properties 6578.
- bacteria, amino sugars, sugars, gas chromatography 9677.
- bacteria, lipopolysaccharides, reaction, polymyxin B, identification, methodology 1790.
- bacteria, peptidoglycans, conformational analysis 3714.
- Candida albicans*, antifungal activity, amphotericin B, nystatin, imidazoles 2477.
- Candida glabrata*, high molecular weight glycoproteins, hydrocarbons effects on 7888.
- chemical composition, *Triticum aestivum*, association, genes, disease resistance, *Erysiphe graminis* f.sp. tritici infection 9476.
- ethylene effects on glycoproteins accumulation, *Colletotrichum lagenarium* infection, *Cucumis melo* 3981.
- Gloeophyllum trabeum*, chitin, colorimetry, methodology 8157.
- gram-negative bacteria, gram-positive bacteria, sanguiniferin effects on 8873.
- hyalase, components, *Phytophthora infestans*, response, *Solanum tuberosum*, protoplasts 3098.
- Leptospira*, polysaccharides, ultrastructure 8330.
- Medicago sativa*, cellulose, *Ruminococcus albus* biodegradation 9259.
- Micrococcus luteus*, humic acids interaction, effects on lyszyme activity 590.
- Mucor mucedo*, biosynthesis, fungicides effects on, association, dimorphism, factors affecting 4310.
- Phytophthora infestans*, extracts effects on, membrane potential, *Solanum tuberosum* 3053.
- Plasmodium croceum*, *Pisolithus tinctorius*, penetration, *Pinus sylvestris*, *Picea abies*, ectomycorrhizas 3165.

walls, (continued)

polysaccharides, 2,3-diamino-2,3-dideoxyglucuronic acid biosynthesis, characterization, *Propionibacterium acnes* 3657.
 rhizobium lupini, proteins, carbohydrates, chemical extraction, methodology 2700.
Staphylococcus aureus, binding, opsins, immunoglobulins, immunofluorescence 8122.
Taphylococcus aureus, phospholipids content, antibiotics effects on 3380.
 streptomyces, fungi, biosynthesis, neopeptin inhibitor, antifungal activity 4396.
 structure, *Glomus fasciculatus*, symbiosis, *Ornithogalum umbellatum* 6357.
 wood, biodegradation, bacteria, aquatic environment 8426.
 yeasts, glucans, reviews 1953.

Free system,

cephalosporin acromonium 3-oxomethylene cephalosporin C conversion 7145.
 thermobacterium violaceum, production, cyanide 1043.
 thapsia magna, cytolytic activity, *Escherichia coli* 5170.
 streptomyces clavuligerus, cephalosporins biosynthesis 1613.
 streptomyces clavuligerus, high-performance liquid chromatography, methodology 1797.

lobiose,

candida wickerhamii fermentation 7533.
 fermentation, ethanol biosynthesis, *Dekkera intermedia* β -D-glucosidase purification, characterization 5513.
 fermentation, yeasts 4744.

fermentation, yeasts, ethanol production 9226.

inhibition cellulose, *Clostridium thermocellum* 1886.

media (culture), *Blaeskea trispora* fermentation, β -carotene, β -D-glucosidase, biosynthesis 104.

metabolism, *Clostridium* 2890.

mineralization, soil microorganisms 7812.

ribohemera, immobilized cells, β -glucosidase, hydrolysis 3791.

lobiose dehydrogenase,

chaetomium cellulolyticum, hydrolysis, cellulose 8253.

lobiose oxidase,

characterization, *Sporotrichum pulverulentum* 4602.

lobiose phosphorylase,

purification, characterization, *Cellvibrio gilvus* 4616.

lodextrins,

fermentation, *Candida*, ethanol 2872.

lobvrio gilvus,

cellulolytic enzymes, cellulose biodegradation 8417.

lutase,

acetivibrio cellulolyticus, substrate specificity 2799.

activity, ethanol production, *Trichoderma* 1047.

activity, fungi, cellulolytic microorganisms 1926.

agogenic biosporus, biosynthesis, relationship, mycelia growth 6559.

Aspergillus fumigatus 8261.

Aspergillus niger, degradation, cellulose, chemical modification 8443.

Aspergillus terreus 5510.

Aspergillus terreus, complex, biosynthesis, release 8324.

assays, *Sclerotium rolfsii*, *Trichoderma reesei* 9158.

bacteroides succinogenes, activity, purification, characterization 8244.

biosynthesis, *Aspergillus terreus*, bagasse fermentation 1826.

inosynthesis, *Aspergillus terreus*, bagasse metabolism 3662.

inosynthesis, *Aspergillus terreus*, pH effects on 3663.

inosynthesis, *Thermomonospora curvata* mutants 9774.

cellulomonas, cellulose biodegradation 154.

cephalosporium sacchari, cellulose biodegradation, oligosaccharides structure 4674.

complex, *Aspergillus terreus*, characterization 99.

complexes, isolation methodology, *Aspergillus terreus* 7267.

ecomposition, ethanol fermentation, yeasts, fungi 3753.

xcretion kinetics, *Trichoderma reesei* 8254.

fermentation enhancement, *Clostridium thermocellum* + *Clostridium*

thermosaccharilyticum, mixed culture 9235.

hydrolysis, cellulose, *Aspergillus aculeatus* 3699.

hydrolysis, lignin formation, role disease resistance, *Avena sativa* 5053.

inetics, *Trichoderma*, *Geotrichum*, *Aspergillus* 4586.

mechanisms, cellulose hydrolysis, structure-activity relationships 9263.

myrothecium, cellulose hydrolysis 7426.

Neurospora crassa, enzymes, use, oranges, extraction, oils, protein 8483.

Neurospora crassa, production, use, cellulose 4740.

xygen transfer rates, effects on, *Trichoderma viride*, production 3671.

enrichment, *Penicillium*, hydrolysis, cellulose, pretreatment 7542.

enrichment, *Penicillium*, immobilization, use, poly(vinyl alcohol) 8315.

enrichment, *Penicillium*, production, fermenters 3677.

enrichment, *Penicillium*, recovery, cellulose hydrolysis 7335.

enrichment, *Penicillium*, recovery, separation techniques association glucose, use, poly(acrylate) gels 8313.

estolipolysis vesiculator, fermentation 9155.

production, activity, *Talaromyces emersonii* 7432.

production, *Aspergillus aculeatus*, media (culture), growth conditions, effects on 3698.

production, *Macrophoma phaseolina*, carbon sources effects on 1932.

production, *Scytalidium lignicola* 6527.

production, *Thermomonospora curvata*, cyclic AMP levels, catabolite repression 9179.

production, *Trichoderma reesei* 2752.

production, *Trichoderma reesei*, indole-3-acetic acid, gibberellin acid, effects on 8320.

production, *Trichoderma reesei*, media (culture) 6526.

production, *Trichoderma reesei*, strains comparison 8325.

purification, characterization, *Humicola lanuginosa* 8258.

purification, characterization, thermophilic bacteria 5505.

cycling, wood hydrolysis, reactors 8445.

rhizopus stolonifer infection, effects on, *Lycopersicon esculentum*, mutants 5773.

porotrichum thermophile, production 8323.

streptomyces flavogriseus, characterization, cellulolytic enzymes 4679.

talarmyces emersonii, hydrolysis, sugar beets cellulose 9153.

talarmyces emersonii, sorption, cellulose substrates 9240.

thermoascus aurantiacus, production 1851.

thermoascus aurantiacus, *Ipex lacteus* 6453.

trichoderma, activity, crop residues, ethanol production 4727.

trichoderma harsizianum, hydrolysis, cellulose, crop residues, pretreatment, heat-grinding 6650.

trichoderma longibrachiatum, production, carbon sources effects on 3678.

trichoderma reesei, activity association substrates, relationship, crystallinity

Cellulase, (continued)

8312

Trichoderma reesei, adsorption characterization, lignocellulose fermentation 7530.

Trichoderma reesei, bagasse hydrolysis, bioreactors 9152.

Trichoderma reesei, degradation, straw, *Triticum aestivum* cultivars effects on 8415.

Trichoderma reesei, elution 1928.

Trichoderma reesei, high-performance liquid chromatography 7365.

Trichoderma reesei, hydrolysis, bagasse, straw, *Oryza sativa* 7430.

Trichoderma reesei, hydrolysis, cellulose, kinetics 9154.

Trichoderma reesei, hydrolysis, *Helianthus annuus* seeds coats, autohydrolysis-explosion pretreatment effects on 9136.

Trichoderma reesei, hydrolysis, hemi-cellulase 9157.

Trichoderma reesei, immobilization, glycoprotein composition 68.

Trichoderma reesei, production, bagasse, pretreatment, γ radiation + sodium hydroxide 8449.

Trichoderma reesei, production, batch culture, methodology, comparison 9068.

Trichoderma reesei, purification, characterization 9146.

Trichoderma reesei, wood pulp hydrolysis 9256.

Trichoderma viride, cellulose hydrolysis 8318.

Trichoderma viride, hydrolysis, *Zea mays* crop residues, pretreatment, heat + sodium hydroxide 8448.

Trichoderma viride, lignocelluloses hydrolyzates, dinitrosalicylic acid assays, sugars 9073.

Trichoderma viride, role, silage, *Medicago sativa*, *Lolium perenne*, *Trifolium pratense* 2931.

Trichoderma viride, *Trichoderma reesei*, *Aspergillus niger*, kinetics, hydrolysis, cellulose 3789.

wastes conversion, bioreactors, *Trichoderma viride* enzymatic activity 9172.

Cellulolytic bacteria,

cellulose hydrolysis 7545.

cellulose hydrolysis, use, single-cell protein production, *Candida tropicalis* 4774.

fermenters, cellulose conversion, methane production 8441.

growth, sugarcane bagasse, proteins products nutritive value 9287.

Cellulolytic enzymes,

adsorption, pH effects on, wood hydrolysis 7548.

Aspergillus fumigatus 8261.

cellulose biodegradation, *Cellvibrio gilvus* 8417.

cellulose, hydrolysis, *Chaetomium crispatum* 9151.

fungi, glucose production, cotton wastes 6653.

production, *Aspergillus aculeatus*, *Botryodiplodia theobromae* 7409.

production, *Penicillium verruculosum* 3697.

release, spore germination, *Trichoderma reesei* 7331.

Streptomyces flavogriseus, cellulase characterization 4679.

Trichoderma, production 7418.

Trichoderma viride, biosynthesis, culture systems effects on 1925.

Cellulolytic microorganisms,

biodegradation, cellulose biodegradation, wood, fungi effects on 2005.

biodegradation, lignocelluloses, feeds production 9252.

cellulose biodegradation, crop fields, agricultural practices, fertilizers effects on 5982.

cellulose biodegradation, pure culture fermentation 3775.

cellulose decomposition 2879.

cellulose hydrolysis, amino acids, carbohydrates effects on 7547.

enzymes hydrolysis lignocellulose, reviews 7540.

fungi flora, soil, surveys, Syria 7815.

fungi, cellulase activity 1926.

fungi, exo-cellulohydrolase activity, relationship, β -D-glucosidase levels, measuring techniques 2814.

media (culture), cellulose structure 6355.

screening, methodology, association, cellulose 3511.

wood decomposition, spatial distribution, stands, *Fagus grandifolia*, *Acer saccharum* 8891.

Cellulomonas,

biodegradation, bagasse 3793.

biodegradation, cellulose, xylan, 1,3- β -D-xylanohydrolase, cellulase 154.

glycerol dehydrogenase, purification, characterization 77.

xylan biodegradation, xylanase biosynthesis 1060.

Cellulose,

acetivibrio cellulolyticus, metabolism, growth 5585.

anaerobic digestion, methanogenic bacteria, methanogenesis 3258.

association, methodology, screening, cellulolytic microorganisms 3511.

biodegradation, *Ascomycetes* mutants 165.

biodegradation, association, carbohydrates composition, fungi 3767.

biodegradation, cellulolytic enzymes, *Cellvibrio gilvus* 8417.

biodegradation, cellulolytic microorganisms, crop fields, agricultural practices, fertilizers cellulolytic microorganisms 5982.

biodegradation, cellulolytic microorganisms, pure culture fermentation 3775.

biodegradation, *Cephalosporium sacchari* cellulase, oligosaccharides structure 4674.

biodegradation, *Chaetomium cellulolyticum*, biomass production 5592.

biodegradation, *Clostridium thermocellum*, comparison, mesophilic bacteria, sugar production 9251.

biodegradation improvements, *Coprinus* mutants, straw substrate 6658.

biodegradation, *Penicillium funiculosum*, rheology 166.

biodegradation, *Phanerochaete chrysosporium*, nitrogen sources effects on 3770.

biodegradation, rumen microorganisms, media nutrient requirements, counting methods 10007.

biodegradation, rumen microorganisms, monensin effects on 9260.

biodegradation, soil, measuring techniques 1058.

biodegradation, straw, *Penicillium coriophillum* 3216.

biodegradation, *Trichoderma*, straw 7539.

biodegradation, wood, fungi effects on cellulolytic microorganisms 2005.

biosynthesis, *Acetobacter acetigenus*, glycerol media 111.

biosynthesis, *Acetobacter xylinum* 7473.

biosynthesis, *Myrothecium* 3668.

cellulose dehydrogenase, hydrolysis, *Chaetomium cellulolyticum* 8253.

cellulose, glucose inhibition, *Clostridium thermocellum* 1886.

cellulase, hydrolysis, *Aspergillus aculeatus* 3699.

cellulomonas, cellulase, biodegradation 154.

chemical modification, degradation, cellulase, *Aspergillus niger* 8443.

conversion, *Clostridium thermocellum*, ethanol production association 9249.

conversion, methane production, fermenters, cellulolytic bacteria 8441.

decomposition, *Botrytis cinerea*, role infection, *Lycopersicon esculentum* 5794.

Cellulose, (continued)

- decomposition, cellulolytic microorganisms 2879.
- decomposition, Hyphomycetes 2903.
- decomposition, prophan + mediotetracetate effects on 7012.
- degradation, *Ruminococcus albus* 5601
- digestion, rumen microorganisms pure culture, carbohydrates effects on 8425.
- digestion, *Ruminococcus albus*, rumen fluids media 8431.
- fermentation, Clostridium, mixed culture 4747.
- fermentation, hydrolysis, ethanol production, *Penicillium funiculosum* + *Saccharomyces uvarum* 8401.
- fermentation, single-cell protein production, *Aspergillus terreus* 8285.
- fermentation, *Trichoderma reesei*, *Saccharomyces cerevisiae*, β -D-glucosidase, ethanol, effects on glucose biosynthesis 4705.
- films, *Saccharomyces cerevisiae*, immobilized cells, ethanol, production 6632.
- fungi biodegradation 5594.
- gels, *Acetobacter aceti* subsp. *xylinum*, crystallinity 8328.
- Hevea brasiliensis, post-harvest decay, decay fungi, Malaysia 7791.
- hydrolysis, cellulase mechanisms, structure-activity relationships 9263.
- hydrolysis, cellulase, *Myrothecium* 7426.
- hydrolysis, cellulase, *Trichoderma reesei* 8318.
- hydrolysis, cellulolytic bacteria 7545.
- hydrolysis, cellulolytic bacteria, use, single-cell protein production, *Candida tropicalis* 4774.
- hydrolysis, cellulolytic enzymes, *Chaetomium crispatum* 9151.
- hydrolysis, cellulolytic microorganisms, amino acids, carbohydrates effects on 7547.
- hydrolysis, *Clostridium acetobutylicum*, *Klebsiella pneumoniae*, fuels production 2018.
- hydrolysis, kinetics, cellulase, *Aspergillus niger*, *Trichoderma reesei*, *Trichoderma viride* 3789.
- hydrolysis, *Penicillium funiculosum*, cellulase, glucose, recovery 7335.
- hydrolysis, pretreatment effects on, *Trichoderma reesei*, *Aspergillus niger* 3676.
- hydrolysis, *Trichoderma reesei* cellulase, kinetics 9154.
- hydrolysis, *Trichoderma reesei* enzymes activity 1056.
- Medicago sativa cell walls, *Ruminococcus albus* biodegradation 9259.
- metabolism, yeasts, ethanol, methane biosynthesis 7510.
- pretreatment, cellulase hydrolysis, *Penicillium funiculosum* 7542.
- pretreatment, heat-irradiation, hydrolysis, cellulase, *Trichoderma harzianum* 6650.
- structure, media (culture), cellulolytic microorganisms 6355.
- substrates, *Talaromyces emersonii* cellulase sorption 9240.
- sugar beets, *Talaromyces emersonii* cellulase hydrolysis 9153.
- surfaces, association *Aspergillus terreus* biomass quantitation 2718.
- use, *Neurospora crassa*, production, cellulase, ethanol 4740.
- wired, *Trichoderma reesei* hydrolysis, *Zymomonas mobilis*, *Saccharomyces cerevisiae*, ethanol production 3750.

Cellulose acetate,

- membranes, isoelectric focusing methodology, bacteria β -lactamase 9038.
- reverse osmosis membranes, biodegradation, bacteria, fungi 2883.

Cellulomonas,

- glycerol dehydrogenase biosynthesis 107.

Cellulobio glivus,

- cellulobiose phosphorylase, purification, characterization 4616.

Cenococcum geophilum,

- mycorrhizas formation, *Tsuga heterophylla* seedlings, USA, Oregon 6912.
- scierotia, abundance, microenvironments, soil, forests 6894.
- symbiosis, *Tilia cordata*, morphology 4207.
- symbiosis, *Tilia cordata*, relationship, drought 4206.

Cenococcum graniforme,

- glutamate dehydrogenase (NADP⁺) activity, purification, nitrogen uptake 6464.
- growth, cadmium, lead, nickel, effects on 3189.

Centaurea cyaneus,

- cucumber mosaic virus isolation, identification 2154.

Centaurea erythraea,

- mycorrhizas, nutrient status, seasonal variations 1490.

Centratherum anthelminticum,

- oil, antimicrobial activity 7909.

Centrifugation,

- bacteria, milk, ultrahigh temperature pasteurization, organoleptic properties 2933.
- blood culture, bacteria, isolation methodology 9947.
- clostridium separation, milk, cheese 8480.
- enumeration, bacteria, food contamination 3581.
- + filtration, blood isolation methodology, anaerobic bacteria, bacteremia 9946.
- preservation, methodology, *Phytophthora palmivora* 6347.
- purification, rabies virus 3522.

Centrosema pubescens,

- cowpea severe mosaic virus infection 4930.

Cephaeloxin,

- antibacterial activity 2529.
- antibiotic resistance development, bacteria 6020.
- antibiotic sensitivity testing 9746.
- antibiotic synergism, alfalfa, index, fractional inhibitory concentration 7989.
- bactencidal activity 7137.
- + flucoxacin, antibacterial activity, infection treatment, man 6132.
- photophotometry 730.
- synthesis, use, *Xanthomonas citri* immobilized cells 9749.

Cephalophora navicularis sp. nov.,

- predation, *Adineta*, soil 9545.

Cephaloridin,

- antibacterial activity, *Staphylococcus*, clinical isolates 8804.

Cephalosporin,

- derivatives, isolation, structure, *Streptomyces griseus* 6139.

Cephalosporin C,

- Acremonium chrysogenum* biosynthesis, nitrogen sources, carbon sources effects on 6140.
- biosynthesis, *Cephalosporium acremonium*, amination, S-sulfo cysteine, use 733.
- biosynthesis, *Cephalosporium acremonium* methionine analogs resistant mutant 4338.
- chromatography 3402.
- penicillin N conversion association, *Cephalosporium acremonium*, glucose metabolism role 8002.
- production, *Cephalosporium acremonium* 6115.
- production, *Cephalosporium acremonium*, fermenters 7994.
- production, *Cephalosporium acremonium*, media characterization 8843.
- relationship, proteolytic enzymes, biosynthesis, growth conditions, effects on, *Acremonium chrysogenum* 4375.
- + amikacin, antibacterial activity, *Enterobacteriaceae* 1614.
- + aminoglycoside antibiotics, antibacterial activity, non-fermentative gram-negative bacteria 1607.
- + aminoglycoside antibiotics, antibiotic synergism, antibacterial activity, *Pseudomonas*, *Escherichia coli* 736.
- analogs, structure-activity relationships 4361.
- antagonism, N-formimidoyl thienamycin, cefotaxim, β -lactamase induction, *Aeromonas hydrophila*, *Serratia marcescens* 7059.
- antibacterial activity 6131.
- antibacterial activity 8837.
- antibacterial activity 9709.
- antibacterial activity, affinity penicillin-binding protein, *Bacteroides fragilis* 7053.
- antibacterial activity, anaerobic bacteria 2535.
- antibacterial activity, *Chlamydia trachomatis* 3396.
- antibacterial activity, clinical aspects 3395.
- antibacterial activity, clinical isolates, *Staphylococcus*, *Escherichia coli* 9740.
- antibacterial activity, disc-diffusion test 9741.
- antibacterial activity, *Enterobacteriaceae* 4343.
- antibacterial activity, *Escherichia coli*, role β -lactamase 4370.
- antibacterial activity, gram-negative bacteria 1606.
- antibacterial activity, gram-negative bacteria 4353.
- antibacterial activity, *Haemophilus influenzae* 4353.
- antibacterial activity, *Haemophilus influenzae*, gram-negative bacteria 6119.
- antibacterial activity, *Klebsiella*, β -lactamase stability 4363.
- antibacterial activity, *Pseudomonas aeruginosa* 9732.
- antibacterial activity, *Pseudomonas*, *Enterobacteriaceae* 4344.
- antibacterial activity, reviews 674.
- antibacterial activity, *Serratia*, *Enterobacter* 4341.
- antibacterial activity, side effects, cost-benefit analysis, reviews 7143.
- antibacterial activity, *Streptococcus faecalis* 8822.
- antibacterial activity, structure-activity relationships 2537.
- antibiotic antagonism, acylureidopenicillins, antibacterial activity, in vitro 6144.
- antibiotic E-0702, antibacterial activity, β -lactamase stability 8833.
- antibiotic resistance, association, β -lactamase, uptake, *Escherichia coli* 9641.
- antibiotic resistance, *Klebsiella oxytoca*, clinical isolates 8731.
- antibiotic resistance, *Neisseria gonorrhoeae* 9637.
- antibiotic resistance, selection, *Enterobacter cloacae* 5157.
- antibiotic resistance, *Staphylococcus aureus* 5160.
- antibiotic resistance, *Staphylococcus aureus* 7035.
- antibiotic sensitivity testing 9746.
- antibiotic sensitivity testing, anaerobic bacteria 7136.
- antibiotic sensitivity testing, clinical isolates, bacteria 7132.
- antibiotic sensitivity testing, *Haemophilus influenzae*, *Streptococcus pneumoniae* 7985.
- antibiotic sensitivity testing, *Klebsiella pneumoniae* serotypes 4369.
- antibiotic sensitivity testing methodology, factor affecting 6305.
- antibiotic sensitivity testing, *Mycobacterium* 7996.
- antibiotic sensitivity testing, *Nocardia asteroides* 3384.
- antibiotic sensitivity testing, *Staphylococcus* clinical isolates 9734.
- antibiotic sensitivity testing, *Streptococcus* group D 9748.
- antibiotic synergism, cefotaxim, gram-negative bacilli, *Staphylococcus* 2531.
- antibiotic U-63196E new records, antibacterial activity, β -lactamase stability 8832.
- biological properties, chemical properties, books 8182.
- biosynthesis, media (culture), inoculum 1608.
- biosynthesis, *Streptomyces clavuligerus*, cell-free system 1613.
- chemical modification, antibacterial activity 2540.
- cloxacillin, antibacterial activity, gram-negative bacteria, β -lactamase 1610.
- comparison, cefmenoxime, antibacterial activity, gram-negative bacteria 6137.
- derivatives, antibacterial activity 6138.
- derivatives, structure-activity relationships, *Morganella morganii*, β -lactamase, hydrolysis 5241.
- derivatives, synthesis, antibacterial activity 6097.
- derivatives, synthesis, antibacterial activity 6135.
- derivatives, synthesis, antibacterial activity 8838.
- derivatives, synthesis, antibacterial activity, structure-activity relationships 8839.
- derivatives, synthesis, antibacterial activity, structure-activity relationships 8840.
- Enterobacter cloacae* antibiotic resistance, role, β -lactamase activity 7036.
- gram-negative bacilli, antibacterial sensitivity testing 2449.
- gram-negative bacilli drug resistance, relationship hospitals 8737.
- induction β -lactamase, bacteria, comparison moxalactam 5273.
- \pm mezlocillin, \pm azlocillin, antibacterial activity 6148.
- Neisseria gonorrhoeae* clinical isolates, antibiotic sensitivity testing 5242.
- new records, antibacterial activity, *Pseudomonas*, *Enterobacteriaceae* 6121.
- Pseudomonas paucimobilis*, antibacterial activity, drug resistance 2512.
- standardization assays 4380.
- structure, relationship, carbonyl stretching 4360.
- structure-activity relationships, conformation 8818.
- structure-activity relationships, physicochemical properties, antibacterial activity 4372.
- synthesis, synthesis, antibacterial activity 4376.
- susceptibility, *Haemophilus ducreyi* 6103.
- synergism, β -lactamase inhibitors, bacteria 6133.
- synthesis, antibacterial activity, gram-negative bacteria 8842.

Cephalosporium,

- α -D-galactosidase preparation 1864.

- spillage effects on seeds germination, *Vigna catung* 3919.

Cephalosporium acremonium,

- Cephalosporium C* production 6115.
- Cephalosporium C* production, fermenters 7994.
- Cephalosporium C* production, media characterization 8843.
- 3-exomethylene cephalosporin C conversion, cell-free system 7145.
- isopenicillin N production 7149.
- antibiotic biosynthesis, catabolite repression 5231.
- methionine analogs resistant mutant, cephalosporin C biosynthesis 4338.
- penicillin N conversion, association, cephalosporin C, glucose metabolism role 8002.
- protoplasts fusion, recombination, β -lactam antibiotics biosynthesis 8806.
- use, S-sulfo cysteine, association, cephalosporin C biosynthesis 733.

Chamaecyparis lawsoniana,

Phytophthora cinnamomi experimental infection, disease resistance 472.

Chamaecyparis nootkatensis,

wood decay, Gloeophyllum trabeum, Poria placenta 3177.

Champagne,

fermentation, morphology, Saccharomyces vini, Saccharomyces oviformis 1990.
flavor, yeasts additives 5572.

Chancroid,

Haemophilus ducreyi clinical isolates, antibiotic sensitivity testing,
association, treatment, man 5191.

Charcoal,

soil amendment, effects on Rhizobium, nodulation, yield, Glycine max 9582.

Charcoal rot,

disease transmission, Cylindrocapsus aspersus role, Helianthus annuus 9444
Mangifera indica, Macrophomina phaseolina, symptoms 2222.

Cheddar cheese,

cheese flavor, volatiles, ripening 9272.
cheese, heat treatments, thiocyanate+hydrogen peroxide+lactoperoxidase effects on 4809.

curing, survival, Campylobacter fetus subsp.fetus 2032.

lactic acid bacteria, D-lactic acid enantiomers, formation 8463.

organoleptic evaluation, starter cultures, Streptococcus lactis,

β -D-galactosidase mutants 9269.

production, sodium chloride effects on clostridium growth 4850.

production, starter cultures, Streptococcus lactis, mutants, lactose fermentation 7570.

ripening, contamination, aflatoxin M1 levels 281.

ripening, proteolytic enzymes, organoleptic evaluation, cheese flavor 9270.

ripening, proteolytic enzymes, organoleptic evaluation 9271.

ripening, sodium chloride+ potassium chloride, Staphylococcus aureus, growth,

enterotoxins biosynthesis 2037.

starter cultures, mesophilic bacteria 3820.

starter cultures, milk, contamination, phages 4804.

Cheese,

acidic, curd, fermentation, starter cultures, thermophilic bacteria 8459.

cheddar cheese, sodium chloride effects on clostridium, growth 4850.

Clostridium botulinum growth, toxins production 2074.

production, centrifugation 8480.

fermentation, heat treatments, thiocyanate+hydrogen peroxide+lactoperoxidase effects on 4809.

food contamination, Salmonella, Staphylococcus aureus 8487

food contamination, Staphylococcus aureus, enumeration, survival 4797.

lactic acid bacteria, starter cultures levels, organoleptic evaluation 3822.

Lactobacillus helveticus, Lactobacillus bulgaricus, Lactobacillus lactis, effects

on, ripening 200.

maturation, association, gas production 237.

microflora, yeasts 7585.

mycophenolic acid biosynthesis, Penicillium roqueforti 982.

Penicillium isolates, potassium sorbate resistance 659.

production, food contamination, Escherichia coli, factors affecting survival 4856.

production, galactose fermentation, Streptococcus thermophilus+lactic acid bacteria 8461.

production, inoculum, Streptococcus lactis, Leuconostoc lactis 198.

production, lactic acid bacteria ripening, soybean milk, organoleptic properties 3823.

production, Lactobacillus casei contamination 9274.

production, nutritive value 2036.

production, pasteurized milk, lactic acid bacteria, organoleptic evaluation 6662.

production, psychrotrophic bacteria effects on yield 4788.

products, food contamination, Clostridium botulinum, toxins production 2943.

Propionibacterium shermani, enumeration 7572.

ripening, amino acids levels, bacteria 5603.

ripening, Bacillus subtilis proteinase 4794.

ripening, contamination, aflatoxin M1 levels 282.

ripening, effects on aflatoxin M1 levels contamination 280.

ripening, lactic acid bacteria, temperature effects on 8460.

ripening, Lactobacillus levels, cheese flavor, chemical analysis 2906.

ripening, proteolysis, lactic acid bacteria, coliforms, organoleptic evaluation 7584.

ripening, salt, effects on, proteolysis 221.

starter cultures, inhibition, antibiotics levels, milk 8482.

water content, Streptococcus thermophilus, acid production, starter cultures 8462.

whay, conversion, single-cell protein production, yeasts 9286.

whay, digestion (anaerobic), chemicals flocculants effects on 9809.

whay, trace elements effects on Candida intermedia 3817.

Cheese flavor,

cheese ripening, chemical analysis, Lactobacillus levels 2906.

organoleptic evaluation, Cheddar cheese, proteolytic enzymes ripening 9270.

volatiles, ripening, Cheddar cheese 9272.

Chelates,

metals, nutrient availability, sewage sludge, digestion (anaerobic) 8947.

Chelating agents,

Boletus edulis extracts, iron, soil 9558.

disassembly, retrovirus 699.

Chemical analysis,

milk pasteurization, bacteria 191.

Chemical control,

Ephelis oryzae infection, Oryza sativa 3149.

metallaxyl, analogs, Phytophthora infestans, Solanum tuberosum 2288.

neodecast, Rhodocycla pseudotsugae, Pseudotsuga menziesii 2312.

Uromyces appendiculatus infestation, Australia 8589.

wilt, Fusarium oxysporum f.sp.gliadioli, Gladiolus 3995.

Chemical extraction,

organic compounds, toxicity, anaerobic bacteria, fermentation 8778.

Chemical modification,

amphipolates, active sites characterization, Aeromonas proteolytica 956.

N-bromosuccinimide, tryptophan residues, histidine decarboxylase, Micrococcus 24

coupling factor 1, mitochondria, Saccharomyces cerevisiae 943.

γ -Glutamylcysteine synthetase, effects on kinetics, Proteus mirabilis 944.

Phytoleuca americana proteins, effects on antiviral activity 1576.

Chemical pollution,

benzene, biodegradation, soil microorganisms 6952.

mutagenicity testing, bacteria 1784.

Chemical pollution, (continued)

soil microorganisms, phenol, biodegradation 8420.

Chemical speciation,

mercury, aquatic environment 1516.

Chemicals,

antifungal activity 3336.

disinfection, diapers 801.

flocculants, effects on digestion (anaerobic), cheese whey 9809.

production, use, fungi, reviews 5443.

+ γ radiation+heat treatments control, Rhizopus nigricans post-harvest decay,

tomatoes 2237.

resistance, Bacillus megaterium spores, association, phosphate media 3280.

treatment, Brassica napus crop residues, Leptosphaeria maculans reproduction

stages suppression 463.

wastes, activated sludge treatment, bioreactors 9804.

Chemiluminescence,

use, clinical microbiology, detection, bacteria, methodology 4478.

Chempodium amaranticolor,

dasheen mosaic virus, Richardia africana, Araceae 9420.

Chempodium ambrosioides,

dasheen mosaic virus, Richardia africana, Araceae 9420.

Chempodium quinoa,

dasheen mosaic virus, Richardia africana, Araceae 9420.

Chemostats,

Bacillus amyloliqueficans, endo-1,3(4)- β -D-glucanase production 2808.

continuous culture, microorganisms, growth rate, reviews 7211.

growth models 9005.

methodology, growth, nutrient requirements, dental plaque isolates, bacteria,

yeasts 4497.

methodology, growth, nutrient requirements, dental plaque isolates, yeasts 4497.

Vibrio cholerae, nutrient status, effects on, immunogenicity, vaccines 1886.

Chemotaxis,

Physarum polycephalum, antimicrobial agents effects on 4306.

Chemotherapeutics,

sensitivity, Streptococcus animal isolates 5193.

Chemotropism,

decay fungi, association, wood volatiles 3765.

Chenopodium,

infection, tobacco necrosis virus, isolation, British Isles rivers 4020.

tulip breaking virus, transmission (mechanical), Lilium longiflorum 7707.

Chenopodium amaranticolor,

cytology, strawberry latent ringspot virus infection 3040.

lucerne transient streak virus, RNA, induction, lesions 5779.

tomato necrosis virus infection, antiviral agents isolation, characterization

8583.

Chenopodium ambrosioides,

essential oils, antifungal activity, Rhizoctonia solani 7933.

Chenopodium murale,

indicator species, carnation latent virus infection 6806.

Chenopodium quinoa,

Aphididae disease transmission potato virus S strains, isolation, North America

6829.

cactus virus X isolates characterization 5019.

potyvirus infection, pathogenicity, Populus isolates 316.

sour cherry necrotic ring spot virus infection 2144.

Cherry leaf roll virus,

association, Phaeosorus vulgans black line, cytopathology 339.

Prunus avium infection 2143.

Chewing gum,

dental plaque prevention, man, association, xytilol, sorbitol 817.

Chick embryos,

influenza virus, antiviral activity, noramide 9692.

polynucleotides, antiviral activity, Semliki forest virus 1578.

toxicity, ochratoxin A: citrinin 2086.

Chickens,

antigenicity, herpesvirus (equine) 1 vaccines, production 8053.

avian infectious bronchitis virus antibody response, neutralization detection

9014.

bacteria food contamination, abattoirs 2034.

carcasses, food contamination, Campylobacter fetus subsp.jejuni 1082.

carcasses, food contamination, Enterobacteriaceae, Salmonella, radiation,

temperature, effects on 4786.

carcasses, food contamination, Salmonella, detection methodology 1077.

carcasses, incidence Salmonella 195.

egg production, aflatoxins effects on 4888.

eggs, food contamination, Clostridium perfringens, Enterobacteriaceae,

Staphylococcus 187.

embryo cells, transformation, Rous sarcoma virus, antiviral activity,

2-nitronaphthofuran derivatives 3362.

Escherichia coli animal isolates, antibiotic resistance, R factors 7043.

Escherichia coli isolates, antibiotic sensitivity testing 4333.

feeding trials, nutritive value, single-cell protein, Saccharomyces fragilis

7608.

feeding trials, single-cell protein, yeasts, calcium, phosphorus, supplementation

9285.

feeding trials, Torula single-cell protein 3856.

feeds, γ radiation effects on, disinfection, storage 8492.

feeds additives, Torula 6682.

feeds contamination, association Aspergillus flavus cyclopiazonic acid

biosynthesis 8512.

food contamination, Campylobacter fetus subsp.jejuni, abattoirs 2925.

infection, Coxella burnetii, antibacterial activity, Allium sativum 668.

juveniles, Escherichia coli, R factors, drug resistance 7039.

juveniles, intestinal microflora, Escherichia coli drug resistance 2411.

livers, food contamination, Campylobacter fetus subsp.jejuni 9277.

metabolism, aflatoxin B1 levels effects on 3882.

molds, grains, nutritive value 3852.

Newcastle disease vaccines, aerosols, antibody response 7188.

Newcastle disease virus vaccines production, immunity 1687.

Newcastle disease virus vaccines, production methodology effects on efficacy

3289.

Salmonella contamination, abattoirs 4845.

Salmonella isolation, media (enrichment) 9060.

Staphylococcus aureus, enterotoxins, biosynthesis 6727.

ckins, (continued)

- icity testing, teratogenicity testing, nutritive value, single-cell protein, *Chaetomium cellulolyticum* 9116.
 aches washings, detection, *Mycoplasma gallisepticum* inhibitors 6302.
cherry blotch virus,
 infection, cytology, electron microscopy, *Cichorium intybus* 2165.
chry virus X,
 infection, *Cichorium intybus*, isolation, characterization 3038.
chren,
 aerobic bacteria isolation, blood culture methodology 2683.
 antibody response, splitting products vaccines, influenza A virus, influenza B virus 3451.
acteremia, *Haemophilus influenzae*, media (culture) detection 9934.
 acteria dental disorders, prophylaxis 811.
 acteria dental disorders, treatment 810.
 food culture, microorganisms detection, use, acridine orange, gram stain, methylene blue 8140.
 dental caries, dental hygiene, fluoride treatment, long-term effects 3499.
 dental caries, fluorosis, fluoride water treatment 8077.
 dental caries, gingivitis, association, oral hygiene, fluoride applications 8076.
 dental caries prophylaxis, fluoride treatment 8081.
 dental caries, prophylaxis, sodium fluoride mouthwashes 8990.
 dental caries, relationship, oral hygiene, sugars consumption 8991.
 enflames, toothbrushing, effects on, dental plaque, formation, reviews 9824.
 enteral disease transmission, role, *Escherichia coli* food contamination, Bangladesh 4847.
uridation, dental caries prophylaxis 6283.
 uride tablets consumption 9000.
 uride topical applications, dental caries prophylaxis 5352.
 ygiene, dental plaque, dental caries, bacteria 2642.
 ydices, fungi, sandbox 1726.
 substitutions, surfaces contamination, coliforms 3494.
 oprosy, subclinical infection detection, fluorescent antibody test 847.
 oral retardation, oral hygiene association, dental caries, Finland 8079.
 oral hygiene, Israel 8999.
 oral microflora prophylaxis methodology 8993.
 revention, dental caries, gingivitis 6282.
 salmonella infection treatment, antibacterial activity, fosfomycin 6189.
le,
 meat products, *Clostridium perfringens* food contamination 208.
 ersea americana, *Verticillium wilt* incidence 5737.
illing,
 eer carcasses, effects on bacteria enumeration 8476.
le infuscatellus,
 control, Bactospeine 1042.
meramycin,
 streptomycetes ambofaciens, biosynthesis 9772.
na,
 food industry fermentation 3821.
na, People's Rep.,
 rachis hypogaeae, peanut mild mottle virus infection, etiology 935. *Bordetella pertussis*,
 chrysanthemum, chrysanthemum stunt viroid infection, detection 6811.
onochloe rigida,
 rasslands soil, assays, β -D-fructofuranosidase, amylase, pH effects on, New Zealand 9565.
 rasslands soil, assays, amylase, β -D-fructofuranosidase, buffers, New Zealand 9564.
rality,
 ntibiotics production, fungi 7127.
tin,
 assays, Basidiomycetes mycelia 4517.
 ionmass assays, *Phaethon tinctorius*, roots, *Pinus pinaster* 9506.
 election, bioassays, rust, fungi, *Leguminosae* 6737.
 elophyllum trabecum, cell walls, colorimetry, methodology 8157.
 emagglutinins binding, *Conidiobolus lamprages*, purification, immunological aspects 6386.
 mmobilized enzymes, α -amylase, *Aspergillus awamori* var. kawachi, starch biodegradation activity 106.
 evels, fungi, indicators, food contamination 3819.
 ves, infection monitoring, blister rust, mycorrhizas 3170.
 hizopus arizicus, effects on uranium adsorption 8714.
tin deacetylase,
 solletrichum lindemuthianum, purification, characterization 6461.
tin synthase,
 olation, *Agaricus bisporus* mycelia, characterization 4624.
tinase,
 ropoposion esculentum, defense mechanisms, wilt, *Verticillium albo-atrum* 4077.
 olation, *Serratia marcescens* 2784.
 erticillium albo-atrum, purification, characterization 2779.
ntolytic bacteria,
 helthless wastes soil amendment stimulation, biological control, soil-borne diseases, *Gossypium hirsutum* 7769.
amylia,
 eat inactivation, antibiotics, antibacterial activity 9714.
 olation, staining, detection, methodology 8123.
amylia pallaci,
 ulture, viruses transfer 9015.
 ug sensitivity testing, antimicrobial agents 7087.
 olation, *Anatidae*, antibiotic resistance 8741.
 ropyting, immunofluorescence 875.
amylia trachomatia,
 antibacterial activity, β -lactam antibiotics 3396.
 antibacterial activity, Clindamycin 6162.
 ntibodies, detection, enzyme-linked immunosorbent assay 3605.
 trimoxazole, trimethoprim, sulfamethoxazole, in vitro antibacterial activity, *Macrococcus* 6008.
 ection, monoclonal antibodies conjugation fluorescein, McCoy cells 9923.
 6-diamidino-2-phenylindole, fluorescence staining 3619.
 rowth, BGM cells 3601.
 umnoglobulin G, detection, enzyme immunoassay 9894.
 umnoglobulin G, immunoglobulin M, detection, enzyme-linked immunosorbent assay 9931.
 olation methodology, cell culture association fetal calf serum 9961.
amyo bacteriaceae,
 entification, isolation, drinking water 9818.

Chlamydiales

- Glomus, antisera production 6965.
 infectivity, forests soil effects on *Phytophthora* 1483.
 Phytophthora cinnamomi, formation, soil survival, infection, *Lupinus angustifolius* 5693.
 Thelazypopsis bascola, germination, nutrient availability, fungistasis, soil 9572.
Chloramphenicol,
 analogs, antibiotic resistance, R factor R26, R factor R55-1, *Escherichia coli* 654.
 antibacterial activity, antibiotic resistance, *Haemophilus influenzae*, *Streptococcus pneumoniae* 7985.
 antibacterial activity, diphtheroids 7977.
 antibacterial activity, *Haemophilus influenzae* 2511.
 antibacterial activity, *Haemophilus influenzae* 7981.
 antibacterial activity, *Haemophilus influenzae*, *Neisseria gonorrhoeae*, *Salmonella typhi*, *Salmonella paratyphi* 756.
 antibacterial activity, *Legionella pneumophila* 9738.
 antibacterial activity, pharmacokinetics, side effects 5172.
 antibacterial activity, *Streptococcus pneumoniae* 7154.
 antibiotic antagonism, penicillins, *Listeria monocytogenes* 5247.
 antibiotic resistance, *Bacillus sphaericus*, *Bacillus licheniformis* 9642.
 antibiotic resistance development, bacteria 6020.
 antibiotic resistance, Enterobacteriaceae, *Pseudomonas* 2393.
 antibiotic resistance, *Escherichia coli*, urinary tract clinical isolates 7034.
 antibiotic resistance, R factors, *Shigella* 7044.
 antibiotic resistance, R factors, *Staphylococcus aureus* 2403.
 antibiotic resistance, *Salmonella* isolates, Netherlands, incidence 5161.
 antibiotic resistance, *Salmonella typhimurium* clinical isolates 4282.
 antibiotic resistance, *Staphylococcus aureus* L form, cell fusion, recombinants 3286.
 antibiotic resistance, *Streptococcus pneumoniae* drug resistance 3300.
 antibiotic sensitivity testing, antibiotic resistance, *Haemophilus influenzae*, *Haemophilus parainfluenzae* 7873.
 antibiotic sensitivity testing, *Campylobacter fetus* subsp. jejuni, clinical isolates 6099.
 antibiotic sensitivity testing, *Clostridium perfringens* 4336.
 antibiotic sensitivity testing methodology comparison 6090.
 antibiotic sensitivity testing, *Propionibacterium* acnes, clinical isolates 3381.
 antibiotic synergism, antibacterial activity, daunomycin transformation, *Streptomyces erythromycini* sp. nov. 675.
 assays 4389.
Bacillus sphaerophilus var. *calidolactis* antibiotic sensitivity testing 5180.
 bacteria urinary tract isolates, antibiotic sensitivity testing, antibiotic resistance 4287.
 bactericidal activity, *Haemophilus influenzae*, comparison, *Escherichia coli*, cell cycle 5259.
 biosynthesis, nutrient requirements, *Streptomyces venezuelae* 6161.
 biosynthesis, *Streptomyces venezuelae*, β -D-glucosidase suppression, association, glucose 2560.
 drug sensitivity testing 7133.
Campylobacter fetus subsp. jejuni drug sensitivity testing 4292.
 comparison, ampicillin, cefamandole, bactericidal activity, *Haemophilus influenzae* 3418.
 + EDTA + tromethamine, antibacterial activity, *Escherichia coli* 8765.
 effects on, *Bacteroides*, growth 6100.
 + gentamicin, removal *Mycoplasma* contamination, viruses culture collections 6293.
Mycoplasmatales virus-kaidlawii DNA replicative intermediates biosynthesis, effects on 1625.
 resistance, enhancement mechanisms, genetic analysis, *Escherichia coli* 7894.
 resistance, *Salmonella typhi*, clinical isolates, case reports 2416.
 resistance, *Streptococcus pneumoniae*, British Isles 648.
Salmonella typhi resistance 5154.
 sensitivity, *Streptococcus animal* isolates 5193.
Streptomyces venezuelae, biosynthesis, gene mapping 4388.
Streptomyces venezuelae, biosynthesis, mechanisms, enzymes association, plasmids role 8857.
Chloramphenicol acetyltransferase,
Escherichia coli, role, fusidic acid drug resistance 7907.
 role, *Escherichia coli* antibiotic resistance fusidic acid, plasmids genetic control 9649.
Chlorella,
 symbiosis, bacteria, photosynthesis, starch biosynthesis 3708.
Chlorella pyrenoidosa,
 + Gluconobacter oxydans, immobilized cells, glycerol conversion dihydroxyacetone 2856.
2-Chloroethylphosphonic acid,
 antifungal activity, wheat post-harvest decay 441.
 effects on pathogenicity, microorganisms infection, plants 319.
Nicotiana tabacum hypersensitive response, tobacco mosaic virus, effects on 4095.
Chloroquine gluconate,
 disinfectants aerosols, airborne microorganisms 5346.
Chlorhexidine,
 antibacterial activity 6040.
 antibacterial activity, dental caries, man 3503.
 antibacterial activity, microflora, hand, man 6275.
 drug resistance, *Serratia marcescens* 1525.
 + 2-propanol, antibacterial activity 5355.
 soaps, use, prophylaxis, skin infection, man, reviews 6276.
Chlorhexidine gluconate,
 + dental cement, antibacterial activity 677.
 levels, contact lenses cleaning systems, colorimetry 4324.
Chloridazon,
 biodegradation, thiosulfate sulfurtransferase, bacteria 156.
Chloride,
 agricultural practices, effects on incidence, *Gaeumannomyces graminis* var. *tritici*, take-all, *Triticum aestivum* 9361.
 uptake, Gramineae, vesicular-arbuscular mycorrhizas 5101.
Chloride peroxidase,
Caldanomyces fumago, concentration effects on activity 4659.
Caldanomyces fumago, isoenzymes, purification 2757.
Chlorination,
 drinking water, *Aeromonas sobria* isolation, biochemical characteristics 6262.
 water, meat contamination prevention 7611.
Chlorine,
 antifungal activity, pears post-harvest decay 1323.

Chlorine, (continued)

- antiviral activity, poliovirus 2468.
 disinfection, dishwashers, water temperature 4458.
 effects on, hepatitis A virus, infectivity, *Saguinus fuscicollis*, *Saguinus nigricollis*, *Saguinus labiatus labiatus*, experimental infection 2488.
 fungi, effects on conidia 2475.
 hepatitis A virus, indicator species, inactivation, pH effects on, disinfection, drinking water 9812.
 residual effects, distilled water, antibacterial activity, *Escherichia coli* 2462.
 resistance, bacteria, drinking water isolates 633.
 washing, sheep, goats, carcasses 6684.
- Chlorine dioxide,**
 antiviral activity, poliovirus 2468.
 drug sensitivity testing, *Escherichia coli*, relationship, growth conditions 667.
- Chloro-D-alanine,**
 metabolism, D-cysteine enzymatic synthesis, *Pseudomonas putida* 4581.
- Chloro-D-alanine chloride-lyase,**
Pseudomonas putida, use, D-cysteine biosynthesis 4557.
- 2-Chloro-6-(trichloromethyl)-pyridine,**
 inhibition, nitrification, ammonification, soil microorganisms 9624.
- 4-Chloro-7- β -D-ribofuranosylpyrrolo[2,3-d]pyrimidine,**
 antiviral activity, production 5212.
- 9-Chloro-9-(4-diethylaminophenyl)-10-phenylacridan,**
 media (culture), association *Pseudomonas aeruginosa* infective 9954.
- 3-Chloroacetylpyridine-adenine dinucleotide,**
 alcohol dehydrogenase inactivation, yeasts 934.
- m-Chlorobenzoate,**
Pseudomonas fluorescens, catabolism, sodium benzoate levels effects on 2015.
- Chlorobenzoates,**
 dehalogenation, bacteria 4749.
- 4-Chlorobenzoic acid,**
 media, *Pseudomonas* amino acids biosynthesis 7308.
- 2-Chlorobiphenyl,**
 biodegradation, bacteria, rivers sediments isolates 8421.
- 3-Chlorobiphenyl,**
 biodegradation, bacteria, rivers sediments isolates 8421.
- 4-Chlorobiphenyl,**
 biodegradation, bacteria, rivers sediments isolates 8421.
- Chlorobium,**
 5-aminolevulinic acid biosynthesis mechanisms 8209.
- Chlorobium limicola,**
 ATP citrate (pro-S)-lyase, purification, characterization 962.
- Chlorobium limicola f.sp. thiosulfatophilum,**
 conversion, hydrogen sulfide, carbon dioxide 2894.
 cytoplasmic membranes lipids, characterization 6589.
- Chlorobium vibrioforme,**
 glutamine synthetase, adenylation 7319.
- Chlorocatechol,**
 biodegradation, soil microorganisms 6967.
- 2-Chloroethanesulfonic acid,**
 inhibition, methanogenesis, acetic acid, metabolism, methanogenic bacteria 5136.
- Chloroflexus,**
 5-aminolevulinic acid biosynthesis mechanisms 8209.
- Chloroheptane-2-one,**
 conversion, *Absidia repens* 3801.
- Chloroneb,**
 resistance, *Aspergillus nidulans* mutants 5151.
- Chlorophenol,**
 derivatives, structure-activity relationships, antimicrobial activity 6029.
- 1,4-(4-Chlorophenoxy)-3,3'-dimethyl-2-(1,2,4-triazol-1-yl)methyl-2-butanol,**
 antifungal activity, yeasts, *Zygomycetes*, clinical isolates 4301.
- Chlorophylls,**
 Cucumber mosaic virus, infection, *Nicotiana tabacum*, effects on, ultrastructure 3078.
- Chloropicrin,**
 +methyl bromide, toxicity, sclerotia, *Sclerotium rotsii*, *Verticillium albo-atrum*, relative humidity effects on 499.
 treatment, *Phellinus weirii* infection, *Pseudotsuga menziesii* 545.
- Chloroprotham,**
 specificity, cell cycle, *Schizosaccharomyces pombe* 690.
- Chlorosis,**
 induction, *Rhizobium japonicum* nodulation, *Arachis hypogaea* 7828.
 Phaseolus vulgaris, phytotoxins induction, *Pseudomonas phaseolicola* 2989.
Pseudomonas syringae pv. tagetes, host range, *Helianthus annuus* 1304.
- Chlorotetracycline,**
 +sodium chloride, treatment, seafood, effects on bacteria, spoilage 2922.
- Chlorothalimol,**
 residues, *Solanum tuberosum* foliage, mathematical models, fungi 5819.
- Chlorothalonil,**
 aerial applications, disease control, *Phaeocryptopus gaeumannii* needlecast, *Peridermium menziesii*, USA, Washington 8679.
 deposition, *Solanum tuberosum*, pesticide residues, mathematical models 1407.
 deposition, *Solanum tuberosum*, pesticide residues, mathematical models 1408.
 disease control, *Cercospora arachidicola*, *Cercosporidium personatum*, leafspot, *Arachis hypogaea* 1409.
 disease control, leafspot, *Apium graveolens* 4098.
 disease control, *Peronospora parasticta*, downy mildew, *Brassica pekinensis* 8631.
 disease control, *Phytophthora palmivora* canker, *Carica papaya* 5058.
 disease control, *Pseudomonas syringae* pv. tomato, speck, *Lycopersicon esculentum* 5822.
 disease control, Rosa canker 1410.
 disease control, *Sclerotinia minor*, blight, *Arachis hypogaea* 3151.
 disease control, *Uromyces appendiculatus* var. *appendiculatus* rust, *Phaseolus vulgaris* 9491.
 +metaxyl treatment, *Spinacea oleracea*, white rust, blue mold, disease control 5064.
 treatment, brown spot, *Drechslera oryzae*, *Drechslera sorokiniana*, *Zizania aquatica* 2272.
- Chlorpromazine,**
 antibacterial activity 8753.
 bacteriostasis, antibacterial activity, *Bordetella* 3323.
- Chlortetracycline,**
 biosynthesis, *Streptomyces aureofaciens*, apyrase, inorganic pyrophosphatase, levels 8004.
 detection, milk, blood 4393.
- Chonophora cucurbitarum,**
 blight, Pathogenicity, *Capsicum annuum* 4004.
- Chocolate,**
 growth patterns, *Saccharomyces rouxii*, isolation 4822.
- Chocolate spot,**
Pseudomonas syringae pv. *coronafaciens*, *Zea mays* 1199.
- Cholera,**
 enterotoxins biosynthesis, *Vibrio cholerae* 6713.
 man, epidemiology, sanitation relationship 2635.
 toxins, biosynthesis, *Vibrio mimicus*, *Vibrio cholerae* 9314.
 water-borne diseases, man, drinking water 2633.
- Cholesterol,**
 biodegradation, *Nocardia*, media (culture) effects on 2893.
 biodegradation, *Streptomyces* 2881.
 Corynebacterium, conversion, 20-carboxy-pregna-1,4-dien-3-one production 120.
- Cholesterol oxidase,**
 Actinomyces laundulae, purification, characterization, ion-exchange chromatography 6554.
- Choline,**
 methanogenesis, *Methanosarcina barkeri*, interaction, *Desulfovibrio* 3261.
- Chondroitin sulfate,**
 digestion, *Bacteroides thetaiotaomicron* 3792.
- Chondrosterium purpureum,**
 silver leaf, *Prunus domestica*, biological control 4067.
 wound infection, disease control, fungicides+paints, *Prunus armeniaca*, *Prunus avium* 8629.
- Choriamate mutase,**
 purification, characterization, *Hansenula polymorpha* 40.
 sites, prephenate dehydrogenase localization, *Escherichia coli* 5487.
- Choristoneura fumiferana,**
 biological control, *Bacillus thuringiensis*, foliar applications 6614.
 biological control, comparison, pathogens virulence, *Bacillus thuringiensis* 8379.
 biological control, pathogens, *Bacillus thuringiensis*, *Thuridice* 16B, *Dipel* 88 9222.
 biological control, sprays, *Bacillus thuringiensis* 7488.
 biological control, sprays, *Bacillus thuringiensis* 8350.
- Chromated copper arsenate,**
 treatment, wood, fungi biodegradation 3766.
- Chromatin,**
 isolation methodology, characterization, *Escherichia coli* 3620.
- Chromatium vinosum,**
 cytochrome c551, isolation, purification, characterization 4555.
 rubulosebiphosphate carboxylase, purification methodology 5409.
- Chromatofocusing,**
 purification reaction centers, cytochrome c2, thylakoids, *Rhodospseudomonas viridis* 6392.
- Chromatography,**
 Citrinin detection, grain 7589.
 colibins fractionation 4417.
 immunoadsorption, purification, *Escherichia coli* acyl carrier protein 8193.
 microheterogeneity M separation techniques, man, hepatitis A 1755.
 Lactobacillus casei folcan, food contamination 4781.
Streptomyces cinnamomeus phospholipase D 28.
- Chromatophores,**
 ATP regeneration, *Rhodospirillum rubrum* 3733.
Rhodospseudomonas capsulata, ATP measurement, reactors 4482.
- Chromosporium olare,**
 infection, *Basidiomycetes* culture 9407.
- Chromium,**
 bacteria uptake, wastewater treatment 5313.
 Bacteroides susceptibility 681.
 containing complexes, separation methodology, *Saccharomyces carlsbergensis* 8155.
 resistance, *Saccharomyces cerevisiae*, detoxification mechanisms 3272.
 soil amendment, sewage sludge, effects on soil microorganisms, growth 5988.
- Chromium chloride,**
 antibacterial activity, *Proteus* 6014.
- Chromobacterium,**
 bacteria growth, association carbon 8069.
 isolation, food, water, soil 2041.
- Chromobacterium lividum,**
 isolation, food, water, soil 2041.
- Chromobacterium violaceum,**
 antibiotic Y-10678H, biosynthesis, antibacterial activity 9768.
 cell-free system, production, cyanide 1043.
 cyanide metabolism, β -cyanolamine biosynthesis, radioactive labelling 2748.
 3,6-dihydroxydioxazene, isolation, structure, antibacterial activity, crown-negative bacteria 6218.
 enkephalin hydrolysis, enzymatic activity, bestatin analogs effects on 7551.
 isolation, food, water, soil 2041.
 monobactams, biosynthesis, association, sulfur, metabolism 5266.
 pest biodegradation 2877.
- Chromotropic acid,**
 use, thin-layer chromatography, mycotoxins 6697.
- Chrysaliidocarpus lutescens,**
 Bipolaris setariae infection, insecticides soaps, foliar applications 9486.
 leafspot, etiology, fungi 1269.
 leafspot, irrigation effects on pathogenesis 1274.
- Chrysanthemoides monilifera subsp. monilifera,**
 rust, *Acidium osteospermii*, pathogenesis 427.
- Chrysanthemum,**
 chrysanthemum stunt viroid infection, China, People's Rep., detection 6811.
 disease resistance, rust, *Puccinia horiana* 8609.
 infection epidemiology, *Chrysanthemum virus B*, tomato aspermy virus, tomato spotted wilt virus 8580.
 rust, *Puccinia horiana* 2204.
- Chrysanthemum morifolium,**
 crown gall 1336.
 disease resistance, *Fusarium oxysporum* f.sp. *chrysanthemi* inoculation 4999.
 stems, *Pseudomonas cichorii* necrosis outbreaks, USA, Florida 5023.
 wilt, *Fusarium oxysporum* f.sp. *chrysanthemi*, inoculation, pathogenesis 5764.
- buds development, effects on vesicular-arbuscular mycorrhizas formation, *Glomus fasciculatus* 4197.
- Chrysanthemum stunt viroid,**
 infection, *Chrysanthemum*, China, People's Rep., detection 6811.

- Chrysanthemum virus B**, infection, *Chrysanthemum*, epidemiology 8580.
- Chrysanthemum**, callus, disease spread, potato spindle tuber viroid, tomato ringspot virus, potato virus M 5793.
- Chrysenes**, biodegradation, composting 2875.
- Chrysomya weirli**, rust, pathology, *Picea pungens* 8659.
- Chrysosporium**, incidence, soil, Germany, Fed. Rep. 3185.
- Chytridiomycetes**, invasion, *Trifolium repens* 5692.
- Chytridiomycetes**, isolation, floors, education institutions 8983.
- Chrysosporium crassitunicatum**, enzymes biosynthesis, media (culture) 3630.
- Chymotrypsin**, assays, 4-methylumbelliferyl esters substrate specificity analysis 5504.
- Cyathodermatomyces**, life cycle, biological control, *Insecta* 1015.
- Cibacron blue**, metals 4-hydroxybenzoate 3-monooxygenase, *Pseudomonas fluorescens* 8275.
- Cicer arietinum**, *Ascochyta rabiei* blight disease resistance, inheritance 6867.
- Cibacron blue**, bacteria infection, effects on, nodulation, yield 2226.
- Cibacron blue**, damping-off, *Pythium ultimum*, etiology, disease control 3911.
- Cibacron blue**, extracts, stimulants, feeding behavior, nuclear polyhedrosis virus mortality, pest control, *Heliothis virescens* 6598.
- Cibacron blue**, inheritance, disease resistance, wilt, *Fusarium oxysporum* f.sp.ciceri 4062.
- Cibacron blue**, isolates, *Rhizobium* characterization 7821.
- Cibacron blue**, nitrogen fixation, association, *Azospirillum brasilense* = *Rhizobium* 5963.
- Cibacron blue**, nodules, *Rhizobium*, nitrogenase activity, relationship extracellular polymers 8678.
- Cibacron blue**, *Phytophthora megasperma* f.sp.glycinea, pathogenicity, temperature effects on 336.
- Cibacron blue**, *Rhizobium* mutants, nodulation, nitrogenase activity, competition 7854.
- Cibacron blue**, *Rhizobium* nodulation, growth, nitrogen fixation 6969.
- Cibacron blue**, *Rhizoctonia bataticola* root rot, factors affecting, rhizoplane microorganisms, rhizosphere microorganisms 7651.
- Cibacron blue**, rhizosphere microorganisms, fungicides foliar applications effects on 4254.
- Cibacron blue**, root rot, *Rhizoctonia bataticola*, biological control, *Streptomyces*, *Stachybotrys atra* 7455.
- Cibacron blue**, seedlings exudates, disease resistance, *Rhizoctonia bataticola*, damping-off, root rot 7755.
- Cibacron blue**, symbiosis, *Rhizobium*, effects on nodules 5966.
- Cibacron blue**, *Ascochyta rabiei* blight, reviews 1142.
- Cichorium endivia**, beet yellows virus infection, disease transmission, *Trialeurodes vaporariorum* 9431.
- Cichorium intybus**, chichory virus X infection, isolation, characterization 3038.
- Cichorium intybus**, infection, chichory blotch virus, cytology, electron microscopy 2165.
- Cichorium intybus**, root rot, *Phymatotrichum omnivorum*, *Phytophthora cryptogea* 5006.
- Cigarettes**, *Cannabis sativa*, contamination, fungi, actinomycetes 8172.
- Cinchocaine**, antibacterial activity 7926.
- Cinchocaine**, antibacterial activity, *Escherichia coli* 8051.
- 1-Cineole**, conversion, 3-exo-hydroxycineole, 3-endo-hydroxycineole, *Aspergillus niger* 3736.
- Cinnamic acid**, decarboxylation, *Saccharomyces cerevisiae* 1989.
- Cinnamic acid**, esters, inhibition, growth, *Pseudomonas fluorescens* 1555.
- Cinnamic acid**, antibacterial activity, gram-negative bacilli bacteriuria isolates, man 7073.
- Cinnamic acid**, comparison, norfloxacin antibacterial activity, *Pseudomonas aeruginosa*, *Staphylococcus aureus* 5197.
- Cinnamic acid**, treatment, gram-negative bacteria urinary tract infection, man, antibacterial activity, reviews 8762.
- Cinopropin**, isolation, *Streptomyces cineraceus* mycelia, physicochemical properties 6236.
- Cinopropin**, structure 6234.
- Ciprofloxacin**, antibacterial activity 9661.
- Ciprofloxacin**, antibacterial activity, Enterobacteriaceae, gram-positive cocci 7924.
- Citric acid**, isolation, culture, *Spiroplasma citri* 1769.
- Citric acid**, vectors, *Spiroplasma citri* disease transmission, feeding, host plants 4920.
- Citrinomyces A**, physicochemical properties, *Streptomyces citratus*, biosynthesis, antibacterial activity 765.
- Citrinomyces A**, structure, N.M.R., *Streptomyces citratus* 764.
- Citrinomyces A**, structure, *Streptomyces citratus* 2578.
- Citrinomyces B**, physicochemical properties, *Streptomyces citratus*, biosynthesis, antibacterial activity 765.
- Citrinomyces B**, structure, N.M.R., *Streptomyces citratus* 764.
- Citrinomyces B**, structure, *Streptomyces citratus* 2578.
- Citrus arvensis**, *Rubus idaeus*, overwintering, mycoplasma-like organisms 6816.
- 12-Abienol**, conversion, soil microorganisms 133.
- 6-Clis-carbapenem**, + β -lactam antibiotics, antibiotic synergism, inhibition, β -lactamase, bacteria 1683.
- 7-Clis-carveol**, conversion, *Streptomyces bottropensis*, (4R,6R)-(+)-6,8-oxidomethyl-en-9-ol production 3732.
- 12-Abienol**, ectomycorrhizas symbiosis, incidence 4210.
- Citocya tabescens**, root rot, *Prunus persica* 2151.
- Citra**, antifungal activity, wheat post-harvest decay 441.
- Citrate (pro-3S)-lyase**, active sites, chemical modification, *Klebsiella aerogenes* 3695.
- Citrate (pro-3S)-lyase**, 2-fluorocitric acid, 2-hydroxycitric acid enantiomers inactivation, bacteria
- Citrate (pro-3S)-lyase**, (continued) 7708.
- Citrate (ii)-synthase**, allosteric properties, dihydrois (succinyl propionate) cross-linking effects on, *Acinetobacter calcoaceticus* 4676.
- Citrate (ii)-synthase**, allosteric properties, subtilisin proteolysis effects on, *Acinetobacter calcoaceticus* 4677.
- Citrate (ii)-synthase**, purification, characterization, *Escherichia coli* 4662.
- Citrate synthase**, isolation, characterization, *Thermus aquaticus*, *Halobacterium salinarum* 5497.
- Citrate synthase**, overproduction, *Saccharomycopsis lipolytica*, enzymes activity association 5483.
- Citrate synthase**, production, genetic engineering, *Escherichia coli* 2786.
- Citrate synthase**, purification, characterization, *Bacillus megaterium* 7396.
- Citric acid**, antibacterial activity, periodontal diseases, roots surfaces 2457.
- Citric acid**, *Aspergillus niger*, aluminum extraction, ash, industrial wastes 5989.
- Citric acid**, *Aspergillus niger*, biosynthesis, aeration, agitation effects on 3644.
- Citric acid**, *Aspergillus niger*, production, fermentation, whey 8196.
- Citric acid**, biosynthesis, *Aspergillus niger* 3661.
- Citric acid**, biosynthesis, *Aspergillus niger*, agitation effects on 3642.
- Citric acid**, biosynthesis, *Aspergillus niger* fermentation, molasses solution 5475.
- Citric acid**, biosynthesis, *Saccharomycopsis lipolytica*, association, utilization, glucose, alkalies 6396.
- Citric acid**, biosynthesis, yeasts, carbon sources effects on 7309.
- Citric acid**, fermentation, gluconic acid, formation, *Aspergillus niger* 1842.
- Citric acid**, fermentation, redox potential, *Aspergillus niger* 5469.
- Citric acid**, overproduction, *Saccharomycopsis lipolytica*, enzymes activity association 5483.
- Citric acid**, production, *Aspergillus niger*, amino acids effects on 5464.
- Citric acid**, production, *Aspergillus niger*, inhibitors 8210.
- Citric acid**, production, *Aspergillus niger*, vitamins effects on 5468.
- Citric acid**, production, *Aspergillus*, yeasts, reviews 5470.
- Citric acid**, production, *Saccharomycopsis lipolytica* 3645.
- Citric acid**, production, *Saccharomycopsis lipolytica* 3647.
- Citrinin**, biosynthesis, nutrient requirements, *Penicillium citrinum* 2064.
- Citrinin**, detection, chromatography, grain 7589.
- Citrinin**, food contamination, flour 276.
- Citrinin**, food contamination, flour 277.
- Citrinin**, schistosomiasis, toxicity, chick embryos 2068.
- Citrobacter**, antibacterial activity, mezlocillin, azlocillin, +cephalosporins 6148.
- Citrobacter**, cefodizime antibacterial activity 7142.
- Citrobacter**, contamination, *Saccharomyces cerevisiae*, acetic acid reduction 4773.
- Citrobacter**, gallate decarboxylase, gallic acid, pyrogallol production 3731.
- Citrobacter**, mecillinam = β -lactam antibiotics antibacterial activity 3314.
- Citrobacter**, norfloxacin antibacterial activity 2440.
- Citrobacter**, pathogenicity effects on, *Beta vulgaris* crop production 403.
- Citrobacter diversus**, β -lactamase, isoelectric focusing 8292.
- Citrobacter freundii**, antibacterial activity, temocillin 5254.
- Citrobacter freundii**, carbapenem derivatives, in vitro, antibacterial activity 1650.
- Citrobacter freundii**, endo- β -D-galactosidase, purification, characterization 6449.
- Citrobacter freundii**, histamine biosynthesis, food poisoning 121.
- Citrobacter freundii**, indicator species, association, drinking water, waste water, water sources 797.
- Citrobacter freundii**, β -lactamase, ceftriaxone inhibition 3397.
- Citrobacter freundii**, β -lactamase inactivation, sulbactam 7180.
- Citrobacter freundii**, β -lactamase inhibition, isodopencillinate, bromopencillinolate 3404.
- Citrobacter freundii**, β -lactamase, purification, kinetics 9140.
- Citrobacter freundii**, recovery, media 877.
- Citrobacter intermedius**, hydrogen biosynthesis, association, growth 124.
- Citrobacter koseri**, botyping, serotyping, drug resistance 7903.
- Citronella**, conversion, *Candida tenuis* 3769.
- β -Citronellol**, metabolism, *Pseudomonas putida*, role, plasmid pSRQ50 6642.
- Citruslus lanatus**, disease resistance, wilt, *Fusarium oxysporum* f.sp.niveum, inoculum, effects on 5774.
- Citruslus vulgaris**, *Fusarium* wilt, disease control, use, antagonists 1354.
- Citrus**, brown rot, *Phytophthora citrophthora*, disease control, fungicides, applications, methodology, comparison 8538.
- Citrus**, canker, *Xanthomonas campestris* pv.citri, pathology 5741.
- Citrus**, citrus tristeza virus infection, disease control 9378.
- Citrus**, disease control, fungi infection, fungicides 4112.
- Citrus**, disease transmission, viruses, mycoplasma-like organisms 3970.
- Citrus**, extracts fermentation, pyruvic acid biosynthesis, *Debaryomyces hansenii* 1822.
- Citrus**, infection synergism, *Geotrichum candidum* + *Penicillium digitatum* 440.
- Citrus**, mal secco disease, *Phoma tracheiphila*, fungicides disease control 4101.
- Citrus**, *Penicillium digitatum* wound infection, post-harvest decay resistance 5802.
- Citrus**, Pierce's disease, blight, bacteria, disease transmission, *Oncometopia nigrans* 1204.
- Citrus**, root rot, *Rhizoctonia solani*, growth conditions 6915.
- Citrus**, vesicular-arbuscular mycorrhizas inoculation, effects on growth 5093.
- Citrus**, wastes, use, *Sporotrichum pulverulentum*, proteins, production 9131.
- Citrus aurantifolia**, essential oils, antifungal activity, *Fusarium lateritium* f.sp.cajani 6082.
- Citrus dimensis**, vesicular-arbuscular mycorrhizas, photoperiod effects on 4209.
- Citrus jambhiri**, seedlings, wilt, Pierce's disease bacteria 392.
- Citrus jambhiri**, vesicular-arbuscular mycorrhizas, effects on water uptake 4135.
- Citrus latifolia**, plant diseases, melanose, greasy spot, epidemiology, *Diaporthe citri*, *Mycosphaerella citri*, USA, Florida 9376.
- Citrus lemon**, seedlings, root rot, *Phytophthora nicotianae* var.parasitica, fungicides disease control 484.
- Citrus limon**, factors affecting, susceptibility, *Geotrichum candidum*, sour rot 2146.
- Citrus**, leaves, mesophyll, disease resistance, *Xanthomonas campestris* 456.

- Citrus meduarensis**, scab, isolation, Sphaeoloma 1220.
- Citrus medica**, *Thelaviopsis paradoxa* soft rot, factors affecting, enzymes 5738.
- Citrus medicago**, plant extracts antifungal activity, storage fungi 7934.
- Citrus paradisa**, root rot, *Phytophthora parasitica*, disease control, metalaxyl, aluminum tns (-O-ethyl) phosphonate 5065.
- Citrus paridisi**, greasy spot, disease control, fungicides, foliar applications 5834.
- Citrus sinensis**, greening disease transmission, *Cuscuta* role 9448. leaves, mesophyll, disease resistance, *Xanthomonas campestris* 456. + *Poncirus trifoliata*, roots exudates effects on spore germination, *Glomus* epigaeum 1477.
- soft rot, *Aspergillus aculeatus*, *Botryodiplodia theobromae*, association pectinolytic enzymes 3965.
- xylem, blocking, blight 8656.
- Citrus tristeza virus**, infection, Citrus, disease control 9378.
- infection, double-stranded RNA isolation, plants 2981.
- Cladobotryum dendroides**, infection, Agaricus, prochloraz, disease control 4118.
- Cladocarpium**, biodegradation, phospholipids, triacylglycerols, cholesterol 2881.
- food contamination, fruit juices, Venezuela 7574.
- infection, *Lycopodium esculentum*, relationship, electrophoresis, acids solubility proteins 2983.
- infection, pathogenicity, *Sitobion avenae* honeydew + barley yellow dwarf virus infection effects on, *Hordeum vulgare*, *Triticum aestivum* 3934.
- microflora, *Hordeum*, fungicides treatment effects on pathogenesis 5766.
- post-harvest decay, cartiloupes, control, use, benomyl + guazatine 6835.
- Cladocarpium carvigenum**, scab, *Carya illinoensis*, effects on nuts drop 6929.
- scab, *Carya illinoensis*, factors affecting spores release 397.
- scab, *Fusicladium effusum*, inoculation time effects on pathogenesis 5736.
- scab, propiconazole disease control, foliar application, *Carya illinoensis* 9496.
- Cladocarpium cladoporioides**, *Dioscorea rotundata* extracts antifungal activity 3339.
- leaf litter biodegradation 3771.
- wound healing, *Daucus carota*, fulcrandiol, 6-methoxymellein, antifungal activity 4078.
- Cladocarpium cucumerinum**, antifungal activity, plant extracts, *Solanum melongena*, *Capsicum frutescens*, *Lycopodium esculentum*, + *Verticillium dahliae* infection 8877.
- antifungal activity, tridemolol diastereoisomers 693.
- cross-resistance, dodine, association fenamrol resistance 7022.
- Cladocarpium fulvum**, extracts, enhancement, necrosis, *Lycopodium esculentum* 3100.
- infection, hypersensitive response, histopathology, *Lycopodium esculentum* 1249.
- Cladocarpium herbarum**, antifungal activity, flavonoids 2283.
- Larix* defoliation, association *Adelges* grazing 540.
- Lupinus* isoflavones antifungal activity 7095.
- post-harvest decay, prunes 5801.
- quinazolones antifungal activity 2476.
- Cladocarpium resiniae**, contamination, petroleum 5140.
- mycelia, role, corrosion, aluminum 169.
- Clavariopsis aquatica**, biodegradation, *Populus tremuloides*, leaf litter 8045.
- Claviceps**, alkaloids biosynthesis, catabolism 7459.
- alkaloids production, role acid phosphatase, alkaline phosphatase 7492.
- alkaloids production, selection, agar media 5562.
- ergot alkaloids biosynthesis, β -naphthylalanine induction 6590.
- ergot alkaloids production, biotin effects on 4914.
- infection, *Panicum repens*, *Panicum antidotale*, India 6770.
- Claviceps fusiformis**, ergot, *Pennisetum typhoidum*, incidence, relationship planting time 5712.
- sclerotia, pure culture, methodology 8152.
- Claviceps paspali**, strains selection, fermentation, alkaloids biosynthesis 6629.
- Claviceps purpurea**, alkaloids biosynthesis, environmental effects 129.
- aspartic proteinase, purification, characterization 5496.
- biosynthesis, alkaloids 5545.
- defective mutant, ergot alkaloid biosynthesis 7506.
- elymoclavine production, carbohydrate metabolism 5554.
- enzymes detection, immunofluorescence, association Gramineae infection 5707.
- ergot alkaloids biosynthesis, thiazolidine-4-carboxylic acid incorporation 1032.
- ergot alkaloids, biosynthesis 5557.
- ergot alkaloids, production, structure 6594.
- ergot, food poisoning, reviews, man 1074.
- ergot, Gramineae, epidemiology 1151.
- infect, *Scleria*, localization, β -glucanase, β -glucosidase, pathogenesis 3917.
- isolation, *Anthrax* lanifolius, association, strains adaption 116.
- morphology, association, ergot alkaloids biosynthesis 3867.
- mycotoxins, food contamination, incidence, British Isles 3878.
- sclerotia, infection, *Secale cereale* seeds, competition, photosynthesis carbon sources 374.
- Clavulanic acid**, + amoxicillin antibiotic synergism, antibacterial activity, *Mycobacterium tuberculosis* 8845.
- + amoxicillin, high-performance liquid chromatography 5252.
- + amoxicillin, β -lactamase activity, bacteria 3411.
- + amoxycillin, *Enterobacter cloacae* resistance 4275.
- + amoxycillin, *Enterobacter cloacae* resistance 4276.
- analogs, synthesis, β -lactamase inhibition, *Escherichia coli*, *Enterobacter cloacae* 6214.
- binding penicillin-binding protein, effects on antibacterial activity 7134.
- + cephalothin, + amoxicillin, antibiotic sensitivity testing, *Mycobacterium fortuitum* 7141.
- suicide inhibitors, β -lactamase, gram-negative bacteria 2810.
- Clavulanic acid, (continued)**
- ticarcillin, antibiotic synergism, antibacterial activity 6147.
- + amoxicillin, antibacterial activity, *Enterobacteriaceae* 745.
- Clay**, denitrifying bacteria, saline water effects on 5964.
- nitrogen cycle, soil microorganisms effects on vegetation 603.
- Clays**, coatings, role, survival, soil, *Beauveria bassiana* 7816.
- coxsackievirus interaction, physicochemical properties 9811.
- effects on, bacteria antagonism, *Gaeumannomyces graminis* infection, *Triticum aestivum* roots 3008.
- effects on *Gaeumannomyces graminis* var. *tritici* growth, interaction, bacteria antagonists 4193.
- poliovirus adsorption 7802.
- soil amendment, effects on *Rhizobium*, nodulation, yield, *Glycine max* 9582.
- Cleaning systems**, contact lenses, chlorhexidine gluconate levels, colorimetry 4324.
- enzyme-linked immunosorbent assay viruses 1764.
- heat exchange, cleaning systems, food industry, bacteria, contamination 4784.
- milking machines, water disinfection, bacteria contamination 5342.
- sanitation, beef carcasses 808.
- sanitation, detergents, milking machines 2632.
- sterilization, breweries 5336.
- Clear cutting**, *Fagus sylvatica* forests, *Picea abies* replacement, bacteria soil microorganisms population changes 7779.
- forests, denitrification 6902.
- Clemastine hydrogen fumarate**, antibacterial activity 8753.
- Clethrionomys**, local microflora, role, litter decomposition, forests 1449.
- Clanthus puniceus**, bacteroids viability, *Rhizobium* 7860.
- Climate**, association, leaf litter decomposition, bacteria, carbon, nitrogen production, *Fagus sylvatica*, coniferals 2021.
- Climatic change**, carbon dioxide pollution effects, nutrient cycles, soil microorganisms 9563.
- Climatic conditions**, *Aschochya avenae*, leafspot, *Avena sativa*, *Triticum aestivum*, *Hordeum vulgare* 8549.
- predictions, *Pythium ultimum*, blight, *Agrostis palustris* 9362.
- Clindamycin**, antibacterial activity, *Bacteroides fragilis* 8811.
- antibacterial activity, *Campylobacter fetus* subsp. *jejuni*, *Campylobacter fetus* subsp. *intestinalis* 8863.
- antibacterial activity, *Chlamydia trachomatis* 6162.
- antibacterial activity, diphtheroids 7977.
- antibiotic resistance *Bacteroides fragilis*, antibiotic sensitivity testing 9735.
- antibiotic resistance, *Bacteroides fragilis*, detection 3655.
- antibiotic resistance, *Bacteroides fragilis*, disc-diffusion test 7031.
- antibiotic resistance, *Bacteroides fragilis*, in vitro 685.
- antibiotic resistance, plasmid pBF4 transfer, *Bacteroides fragilis* 5149.
- antibiotic resistance, *Propionibacterium*, clinical isolates, acne 8736.
- antibiotic resistance, *Streptococcus*, mastitis isolates 2398.
- antibiotic resistance, transfer, *Clostridium difficile* 6011.
- antibiotic sensitivity testing, *Bacteroides fragilis* 5262.
- antibiotic sensitivity testing, *Campylobacter fetus* subsp. *jejuni*, clinical isolates 6099.
- antibiotic sensitivity testing, *Clostridium perfringens* 4336.
- antibiotic sensitivity testing, *Propionibacterium* acnes, clinical isolates 3381.
- Bacteroides fragilis* antibiotic sensitivity testing 7130.
- Bordetella pertussis*, drug sensitivity testing 7133.
- Campylobacter fetus* subsp. *jejuni* drug sensitivity testing 4292.
- comparison, cefmenoxime, cefotetan, anaerobic bacteria susceptibility 5194.
- effects on, *Bacteroides*, growth 6100.
- effects on cytotoxins production, *Clostridium difficile* 2091.
- inhibition, β -lactamase, *Enterobacter*, *Pseudomonas aeruginosa* 7155.
- resistance, *Bacteroides*, nucleotide sequence homology 6013.
- Clinical microbiology**, antibiotic sensitivity testing, anaerobic bacteria 4328.
- antibiotic sensitivity testing, clinical isolates 712.
- antibiotic sensitivity testing, relationship, pharmacokinetics 4329.
- antibiotic sensitivity testing, surveys 4326.
- bacteria clinical isolates identification, counter immunoelectrophoresis, fluorescent antibody test 834.
- Gardnerella vaginalis*, media (isolation) 9030.
- laboratories, quality control 710.
- quality control, British Isles 711.
- respiratory syncytial virus isolation, HEp-2 cells 9009.
- streptolysin O antibodies, detection 4507.
- technology, use, bacteria enzymes 970.
- use, bioluminescence, chemiluminescence, detection, bacteria, methodology 4478.
- viruses detection, enzyme-linked immunosorbent assay 9858.
- Citidine**, toxins, structure, *Citrocybe acrometala* 4907.
- Citrocybe acrometala**, citidine toxins, structure 4907.
- Citrocybe illudens**, 4 α -hydroxydihydroilludin, structure 3729.
- Citrocybe pseudoirina**, mushroom poisoning, case reports, man 5604.
- Citrocybe tabescens**, root rot, fumigants disease control, *Malus pumila* 492.
- Civlia miniata**, alkaloids, antiviral activity 6069.
- Clofocetol**, effects on, *Bacillus subtilis*, membrane permeability 6053.
- Cloning**, antibiotic resistance, nutrition, genes, *Streptomyces vinaceus*, *Streptomyces* collector 152.
- Bacteroides fragilis* subsp. *thetaiotaomicron*, DNA fragments, plasmids, identification association 4487.
- Streptomyces azureus*, *Streptomyces erythraeus*, *Streptomyces vinaceus*, *Streptomyces fradiae*, antibiotic resistance, genes 1521.

ling, (continued)

- reptomycetes, genes, andicidin, biosynthesis 8032.
 reptomycetes kasugaensis DNA, methodology 6313.
- Imipramine,**
 antibacterial activity 8753.
- Influenza virus,**
 at-roll, *Vitis vinifera* 3073.
- Isradipine,**
 antibacterial activity, cefotetan 4345.
 antibiotic sensitivity testing, teichomycin, vancomycin 6202.
 rifreronam antibacterial activity 777.
- Jodetatoration,** milk, milk products 6666.
 Jodetatoration, mixed culture 4747.
- Jodetatoration,** identification, fatty acids 6321.
 Jodetatoration, incubation, anaerobic environments 2680.
 Jodetatoration U-57930E antibacterial activity 4379.
 Jodetatoration (anaerobic), animal wastes, pigs 5301.
 Jodetatoration metabolism, cellobiose metabolism 2890.
 Jodetatoration, cheddar cheese production, sodium chloride effects on 4850.
 Jodetatoration inhibition, nitrate role, silage fermentation 6681.
 Jodetatoration-zeta-hydroxyester dehydrogenase substrate specificity 1873.
 Jodetatoration immobilized cells, aldehydes hydrogenation 10.
 Jodetatoration indicator species, microbial pollution, sediments, coastal waters 8065.
 Jodetatoration infection, cephradine, treatment, *in vitro* antibacterial activity 676.
 Jodetatoration (culture), Bacillus, enumeration, digestion (anaerobic), crop residues 7197.
 Jodetatoration fecal microflora, salmonella administration effects on, pigs 5624.
 Jodetatoration lactamase detection methodology 9037.
 Jodetatoration free species, acetic acid production 4572.
 Jodetatoration indazole antibacterial activity 3328.
 Jodetatoration (at), biodegradation, anaerobic conditions, C/N ratios 9264.
 Jodetatoration post-harvest decay, potatoes 2235.
 Jodetatoration operation, milk, cheese, centrifugation 8480.
 Jodetatoration (large) production, fermentation 8490.
- Jucose fermentation 2057.**
- Jucose acetobutylicum,**
 acetone, butanol, production, pH effects on 5563.
 Jucose (butanol) production 2865.
 Jucose (butanol) production, use, *Pinus radiata* hydrolysates 8390.
 Jucose (butanol) culture methodology 8087.
 Jucose (butanol)-CoA hydratase, purification, characterization 8243.
 Jucose (butanol) fermentation, butanol, Silicite, adsorption 4739.
 Jucose (butanol) production, cellulose hydrolysis 2018.
 Jucose (butanol) fermentation, acetic acid, butyric acid, effects on 4726.
 Jucose (butanol) immobilized cells, metabolites production, control methodology 6583.
 Jucose (butanol) media (culture), effects on, acetone, butanol, production 2660.
 Jucose (butanol) production, acetone, butanol, continuous culture 1037.
 Jucose (butanol) production, butanol, acetone, continuous culture, batch culture, nitrogen limitations 8393.
- Jucose, butanol, biosynthesis, fermenters 119.**
- Jucose aurantibutylicum,**
 reduction, acetone, isopropanol, butanol 2845.
- Jucose bejerinckii,**
 Jucose (butanol) biosynthesis 7865.
 Jucose (butanol) continuous culture, solvents production 9215.
 Jucose (butanol) immobilized cells, fermentation, isopropanol butanol+ethanol 9241.
 Jucose (butanol) immobilized cells, fermentation, 2-propanol, butanol, ethanol 4737.
 Jucose (butanol) reduction, acetone, isopropanol, butanol 2845.
- Jucose bifurmentans,**
 acetocinacins activity 4410.
 Jucose (butanol) acetone, concentrations effects on fermentation products 4551.
 Jucose (butanol) valeric acid biosynthesis, enzymes isolation, characterization 9174.
- Jucose botulinum,**
 Jucose (butanol) nitrogen S, purification, characterization 2742.
 Jucose (butanol) carbon dioxide effects on toxins biosynthesis 5658.
 Jucose (butanol) cheese products, toxins production 2943.
 Jucose (butanol) Clostridium difficile, toxins, identification, lethality, mice 2080.
 Jucose (butanol) contamination, honey, infants food 2031.
 Jucose (butanol) food contamination, meat, factors affecting growth 4790.
 Jucose (butanol) as production, relationship toxins production 2960.
 Jucose (butanol) growth, potassium sorbate inhibition, cured products, meat 3857.
 Jucose (butanol) growth, potassium sorbate, pH effects on 8497.
 Jucose (butanol) growth, toxicity, nitrite inhibition, organoleptic properties, sausages 303.
 Jucose (butanol) growth, toxins production, cheese, growth, Clostridium botulinum, toxins production, cheese 2074.
 Jucose (butanol) Jurotoxins, hemagglutinins, purification, physicochemical properties 7635.
 Jucose (butanol) Jurotoxins, urea effects on activity 5661.
 Jucose (butanol) Jurotoxins, control, cured products, reviews 4821.
 Jucose (butanol) Jurotoxins, effects on, toxins, production 2089.
 Jucose (butanol) Jurotoxins, diffusion tests 1935.
 Jucose (butanol) Jurotoxins, inactivation, heat transfer, mushrooms, canning 1093.
 Jucose (butanol) Jurotoxins, antigenicity, pH effects on 308.
 Jucose (butanol) Jurotoxins, characterization 7636.
 Jucose (butanol) Jurotoxins, food contamination, preservatives 7637.
 Jucose (butanol) Jurotoxins, enzyme-linked immunosorbent assay 9283.
 Jucose (butanol) Jurotoxins, purification, characterization 2077.
- Jucose botulinum type B,**
 growth, effects on, seafood, toxigenicity toxicity 309.
- Jucose botulinum type E,**
 Jurotoxins, purification, amino acid composition 9300.
- Jucose botulinum type F,**
 growth, effects on, seafood, toxigenicity toxicity 309.
 Jurotoxins, purification, amino acid composition 9301.
- Jucose botulinum type G,**
 growth, effects on, seafood, toxigenicity toxicity 309.
- Jucose butyricum,**
 Jodetatoration, milk, milk products 6666.
 Jucose (butanol) immobilized cells, hydrogen, production, glucose 1976.
 Jucose (butanol) lactamase, purification, characterization 1892.
 Jucose (butanol) growth, nitrogen fixation 3216.
- Jucose difficile,**
 antibacterial activity, teichomycin 7183.
 Jucose (butanol) antibiotic L-640,876 antibacterial activity 4426.
 Jucose (butanol) antibiotic resistance, clindamycin, erythromycin, tetracycline, transfer 6011.
 Jucose (butanol) antibiotic sensitivity testing, teichomycin, vancomycin 6202.
 Jucose (butanol) Jgens, counter immunoelectrophoresis 4477.
- Clostridium difficile, (continued)**
 Clostridium botulinum, toxins, identification, lethality, mice 2080.
 Clostridium colitis, diagnosis methodology, feces Gram stain 9940.
 Clostridium colitis, immunodiagnosis, counter immunoelectrophoresis, cytotoxins, faces, man 9306.
 Clostridium counter immunoelectrophoresis detection toxins, feces 4912.
 Clostridium cytotoxins production, clindamycin effects on 2091.
 Clostridium gastrointestinal tract clinical isolates, norfloxacin antibacterial activity 2455.
 Clostridium identification, gas-liquid chromatography 840.
 Clostridium identification, media (culture), norleucine+tyrosine 9907.
 Clostridium lysozymes, iodoxides, eggs, antibacterial activity 1552.
 Clostridium media (selective) 6319.
 Clostridium toxin A, enzyme-linked immunosorbent assay 9303.
- Clostridium histolyticum,**
 clostrin, amino acid sequence 4636.
 Clostridium collagenase, purification, substrate specificity, collagen proteolysis 6412.
- Clostridium kluyveri,**
 acetyl-CoA acetyltransferase, purification, characterization, selenomethionine identification 887.
 Clostridium dihydrolypamide reductase (NAD⁺), bioassays, bile acids 4504.
- Clostridium paraputrificum,**
 18-deoxyaldehyde reduction 4695.
- Clostridium pasteurianum,**
 antibacterial activity, kinothricin 1665.
 Clostridium glucuronate dehydratase, purification, characterization 6431.
 Clostridium hydrogen biosynthesis, association, growth 124.
 Clostridium hydrogenase activity, pH, redox potential effects on 5492.
 Clostridium nitrogen fixation inhibition, nitrite association 5124.
 Clostridium nitrogens cofactors, iron, molybdenum, sulfur, levels 4593.
 Clostridium 6-phosphofructokinase, characterization 6442.
 Clostridium proteolysis, regeneration, methodology 9029.
- Clostridium perfringens,**
 antibacterial activity, moxalactam 5270.
 Clostridium antibacterial activity, teichomycin 7183.
 Clostridium antibacterial activity,
 6- α -hydroxyethyl-2-acetoxyethyl-2-penem-3-carboxylate 1611.
 Clostridium antibiotic resistance, β -lactam antibiotics, association, penicillin-binding protein 3651.
 Clostridium antibiotic sensitivity testing 4336.
 Clostridium antibiotic sensitivity testing, antibiotic resistance, meat isolates 5235.
 Clostridium antibiotic sensitivity testing, cefoperazone 9743.
 Clostridium antibiotic sensitivity testing, cephalosporins 7136.
 Clostridium antibiotic sensitivity testing, teichomycin, vancomycin 6202.
 Clostridium biodegradation, milk, milk products 6666.
 Clostridium endotoxins, detection, enzyme-linked immunosorbent assay 5655.
 Clostridium enterotoxins, assays 6711.
 Clostridium enterotoxins, detection methodology 2964.
 Clostridium enterotoxins, N-terminal, amino acid sequence 5660.
 Clostridium enumeration, media (culture) 5420.
 Clostridium feces, man, water resources, quantification 5322.
 Clostridium food contamination, chickens eggs 187.
 Clostridium food contamination, meat products, Chile 208.
 Clostridium food contamination, pork, cooking, kitchens 1066.
 Clostridium food poisoning, association, temperature, epidemiology, British Isles 3828.
 Clostridium food poisoning, pasta, kitchens hygiene, man 7576.
 Clostridium L form, bacteriocins antibacterial activity 759.
 Clostridium growth, food contamination, beans 219.
 Clostridium growth methodology, bacteriocins analysis 2705.
 Clostridium mutants, metronidazole drug resistance 3294.
 Clostridium phosphatidylserine synthase, purification, characterization 5485.
 Clostridium phospholipase C, purification, characterization 8239.
 Clostridium spores, extraction, sediments, methodology 1771.
 Clostridium spores, media (selective) 892.
 Clostridium strains, nitrate reductase comparison 5500.
 Clostridium toxins, food contamination, conferences 5453.
 Clostridium toxins, food poisoning, man, USA 2958.
- Clostridium ramosum,**
 antibiotic L-640,876 antibacterial activity 4426.
- Clostridium saccharolyticum,**
 ethanol, production, growth conditions, media (culture) 5575.
 Clostridium nutrient requirements, growth conditions, ethanol, production 5574.
- Clostridium saccharoperbutylacetonicum,**
 autolysis, purification, characterization 1897.
- Clostridium sorbellei,**
 cytotoxins, toxicity, media (culture) 6719.
- Clostridium sporogenes,**
 biodegradation, milk, milk products 6666.
 Clostridium glucose concentrations effects on fermentation products 4551.
- Clostridium tetani,**
 tetanus toxins, blood donors, antibodies, screening, latex agglutination 3621.
 Clostridium toxins, amino acid composition, comparison light chains, heavy chains 4906.
 Clostridium toxins crystals, characterization 3890.
 Clostridium toxins, structure, reviews 2078.
- Clostridium thermoaceticum,**
 carbon monoxide dehydrogenase, purification, characterization 2769.
 Clostridium carbonated beverages contamination 8457.
 Clostridium comparison, Acetobacter woodii, carbon monoxide dehydrogenase, purification, characterization 8262.
 Clostridium formate dehydrogenase (NADP⁺), molybdenum, tungsten containing multiple forms, purification, activity, C.D., E.S.R., absorption spectroscopy 8280.
- Clostridium thermocellum,**
 cellulose, cellobiose, glucose inhibition 1866.
 Clostridium cellulose conversion, ethanol production association 9249.
 Clostridium cellulose hydrolysis 7545.
 Clostridium +Clostridium thermosaccharolyticum mixed culture, cellulase fermentation, enhancement 9235.
 Clostridium comparison, mesophilic bacteria, sugar production, cellulose biodegradation 9251.
 Clostridium immobilization, use, coal 5424.
- Clostridium thermohydrofurum,**
 polyamines biosynthesis 9205.
- Clostridium thermosaccharolyticum,**
 +Clostridium thermocellum mixed culture, cellulase fermentation enhancement 9235.
- Clostridium thermoautotrophicum,**
 polygalacturonase, pectinesterase, characterization 4660.

- Clostripain**, amino acid sequence, *Clostridium histolyticum* 4636.
- Clostrimazole**, antibiotic sensitivity testing, yeasts 2502.
- antifungal activity, *Candida albicans* 7937.
- antifungal activity, *Curvularia lunata* var. *aeria* 7939.
- antifungal activity, dermatophyte fungi, yeasts 7938.
- Saccharomyces cerevisiae*, effects on toxin biosynthesis 5203.
- Clover yellow vein virus**, = *Codinaea fertilis* infection, inhibition growth, *Trifolium repens* 2100.
- infection, *Gladiolus* 3075.
- infection, *Trifolium repens*, pathology, association, Aphididae filters prevention transmission 1147.
- plant viruses, Leguminosae, USA, Tennessee, identification 5689.
- Cloxacillin**, +ampicillin, +cephalosporins, antibacterial activity, gram-negative bacteria, β -lactamase 1610.
- antibacterial activity, *Streptococcus* group B 3409.
- antibiotic tolerance, *Staphylococcus aureus* 5250.
- disc-diffusion test, *Staphylococcus aureus*, methicillin sensitivity 639.
- Clubroot**, association, *Plasmodiophora brassicae* races detection, USA 3977.
- Cruciferae*, race, 3-indolylmethylglucosinolate conversion 5761.
- fungi, *Brassica oleracea*, disease control, transplantation 4073.
- Plasmodiophora brassicae*, *Raphanus sativus*, pathogenecity, association, soil moisture, soil temperature 6815.
- Plasmodiophora brassicae*, *Brassica* 2212.
- Plasmodiophora brassicae*, *Brassica oleracea*, *Brassica rapa*, disease resistance breeding 9477.
- Plasmodiophora brassicae*, calcium carbonate, effects on, pathogenesis, *Cruciferae* 4255.
- Plasmodiophora brassicae*, crop fields, calcium sulfate, sodium carbonate, calcium carbonate, effects on 314.
- Plasmodiophora brassicae*, disease control, foliar applications, herbicides, *Brassica oleracea* 8632.
- Plasmodiophora brassicae*, pathogenecity, *Cruciferae* 2211.
- Plasmodiophora brassicae*, role zoospores, *Brassica campestris* 4998.
- Clumping**, *Staphylococcus aureus* identification 6324.
- Coagulase**, association, polymyxin, susceptibility, *Staphylococcus*, strains 8866.
- biosynthesis, *Staphylococcus aureus* defective mutant, isolation methodology 9040.
- indicators, food contamination, *Staphylococcus* 3810.
- negative *Staphylococcus*, antibiotic sensitivity testing 7122.
- Coagulation**, inhibition, radioimmunoassay, detection, hepatitis B surface antigen 828.
- monocytes, endotoxins, assays 3893.
- Coagulation factor VIII**, purification, use hepatitis B virus antigens, column chromatography 3542.
- Coal**, adsorption, *Thiobacillus ferrooxidans* 8712.
- gases, wastewater treatment, filters, anaerobic microorganisms 8952.
- industrial sites, industrial effluents, bibliographies 1699.
- inoculum, effects on *Rhizobium phaseoli* survival, *Phaseolus vulgaris* seeds 3159.
- mines, bacteria, methane oxidation 4265.
- mines, land reclamation, seedlings, inoculation, fertilizers slurries + *Rhizobium* 8631.
- mines, reclaimed land, iron-oxidizing bacteria, vertical distribution levels 9561.
- mines, soil microorganisms, community composition, organic matter decomposition 5914.
- mines, wood supports, brown rot, white rot 6934.
- seams, methane extraction, use, culture, growth, methylophilic bacteria 7870.
- soil removal, *Sulfolobus acidocaldarius*, fermenters 3254.
- use, *Clostridium thermocellum* immobilization 5424.
- waste water, bacteria, drainage systems, sodium lauryl sulfate, sodium benzoate, inhibition 8713.
- Coastal environments**, sand, arylsulphohydrolase, cysteine desulphohydrolase, sulphate cyanide sulphurtransferase, activity, correlation, vegetation, British Isles 6955.
- Coastal waters**, microbial pollution, mathematical models 9813.
- sediments, microbial pollution, indicator species 8065.
- Vibrio ecological distribution, salinity, temperature, nutrient concentrations 6259.
- Coat protein**, fractionation, characterization, spores, *Dicystostelium discoides* 1831.
- tobacco mosaic virus, association, disease resistance, *Nicotiana tabacum*, role, N⁺ gene 6848.
- Coated vesicles**, isolation, immunoadsorption, use, *Staphylococcus aureus* 884.
- Coatings**, clays, role, survival, soil, *Beauveria bassiana* 7816.
- microorganisms, methodology, scanning electron microscopy 1735.
- pharmaceuticals, use, polymers solutions, microorganisms growth association 5345.
- waxes, plastics, plant protection, fungi infection, *Sorghum bicolor*, *Zea mays*, *Triticum aestivum* 4071.
- Coats**, seeds, *Helianthus annuus*, autohydrolysis-explosion pretreatment, effects on *Trichoderma reesei* cellulase hydrolysis 9136.
- Cobalt**, antimicrobial activity, *Entamoeba histolytica*, *Staphylococcus aureus* 2497.
- effects on enolase substrates binding, N.M.R., yeasts 6544.
- regulation, biosynthesis, gentamicin, sagamicin, *Micromonospora sagamiensis*, mutants 6195.
- stimulation, nitrogen fixation, nitrogen-fixing bacteria, soil isolates 3236.
- toxicity, nickel resistance, *Neurospora crassa* 7906.
- Cobweb disease**, *Hymenocys rosellus*, prochloraz, disease control, *Basidiomycetes* 6824.
- Coccidioides**, self fluorescence, use, detection, tissues 8156.
- Coccidioides immitis**, coccidioidomycosis, fluorescence diagnosis, tissues 4525.
- identification, immunodiffusion 4543.
- Coccidioidomycosis**, fluorescence diagnosis, tissues 4525.
- Coccomyces hiemalis**, infection, *Prunus cerasus*, water effects on pathogenesis 1203.
- Cochliobolus carbonum**, infection, *Zea mays*, disease resistance inheritance 455.
- infection, *Zea mays*, virulence 375.
- inoculation, *Zea mays*, host-pathogen interactions 382.
- Cochliobolus heterostrophus**, leaf blight, *Zea mays*, Tanzania 7673.
- phytoalexins biosynthesis, *toxi1* locus, gene regulation 2953.
- races, T toxin production 288.
- T toxin biosynthesis 2072.
- Cochliobolus sativus**, conidia, hyphae, soil microorganisms colonization, fluorescence microscopy 3625.
- infection, *Avena*, *Gaeumannomyces graminis* suppression, soil, effects on 3205.
- infection, *Gramineae*, *Gaeumannomyces graminis* suppression, soil, effects on 3207.
- infection, *Hordeum*, seed treatments, disease control, fungicides 1429.
- infection, *Triticum aestivum*, fallow land effects on root rot 379.
- Leptomixida lysis, phagocytosis, soil 563.
- media (selective), isolation, soil 4526.
- root rot, *Hordeum vulgare*, planting density effects on 7674.
- smut, effects on, *Agropyron intermedium*, nutritional status 8548.
- vertical distribution, soil, tillage, crop residues burning, *Triticum aestivum* 9358.
- Cochliobolus victoriae**, conidia germination, competition, environmental stress, nutrient availability, soil 9573.
- conidia, germination, nutrient availability, fungistasis, soil 9572.
- Cocoa**, food contamination, media (isolation), *Enterobacteriaceae* 1791.
- Cocoa swollen shoot virus**, infection, *Theobroma cacao*, pathogenesis 3026.
- Coccol**, yellows, mycoplasma-like organisms, disease transmission, vectors, *Dettocephalus flavicosta* 1210.
- Cocos nucifera**, cadang-cadang, incidence, Philippines 1208.
- leafspot, *Pestalotia palmorum*, *Helminthosporium*, disease control, fungicides 1391.
- mycoplasma-like organisms infection, etiology, Tanzania 3972.
- mycoplasma-like organisms infection, pathogenesis, tissues distribution 8566.
- mycoplasma-like organisms, wilt, pathogenesis 8567.
- mycoplasma-like organisms yellowing, roots symptoms, Jamaica 2228.
- mycoplasma-like organisms yellows, phloem sap, collection, characterization 388.
- mycoplasma-like organisms yellows, phloem sap, composition 387.
- roots wilt, pathogenesis 1227.
- Spiroplasma pathogenicity, association yellows 3968.
- wilt 7681.
- yellows, mycoplasma-like organisms, new records, Mexico 7678.
- yellows, Mycoplasma-like organisms, oxytetracycline, disease control 1206.
- yellows, mycoplasma-like organisms, sap, chemical composition 1226.
- yellows, sap, isolation, Mycoplasma-like organisms 1205.
- Codinaea fertilis**, = clover yellow vein virus infection, inhibition growth, *Trifolium repens* 2100.
- mycorrhizas, roots colonization, seasonal variations, *Trifolium repens* 554.
- Coenzyne A**, biosynthesis, *Brevibacterium ammonigenes* immobilized cells, continuous culture 1644.
- biosynthesis, *Streptomyces levoris*, yeasts stimulates effects on 8021.
- Coenzyne F420**, assays, methanogenic bacteria, high-performance liquid chromatography + fluorescence, sewage sludge 9021.
- Coenzyne F430**, containing proteins, purification, characterization, *Methanosarcina barkeri*, *Methanobacterium thermoautotrophicum* 2737.
- Coenzyne**, pyridines, biosynthesis, *Aspergillus* 3689.
- Coffea**, agricultural ecosystems, nutrient sources, nitrogen fixation, Inga jinicuil 3226.
- anthracnose, eye spot, Cuba 2189.
- Cuba, *Colletotrichum gloeosporioides* anthracnose, *Ceroaspora coffeicola* eye spot 3910.
- Hemileia vastatrix* leaf rust, pathogenicity 6784.
- Hemileia vastatrix* rust, Mexico 5682.
- plantations, nitrogen cycle 3217.
- plantations, nitrogen cycle, leaf litter decomposition 3218.
- seedlings, dieback, *Phoma costaricensis* 7682.
- Coffea arabica**, *Colletotrichum coffeanum* disease resistance, inheritance 6864.
- Colletotrichum coffeanum* infection, pathogenesis, association *Glomerella cingulata* 9379.
- infection, *Hemileia vastatrix*, plant diseases pathogenicity measuring techniques, mathematical models 1116.
- leaf rust, disease control, *Hemileia vastatrix* 4076.
- leaf rust *Hemileia vastatrix*, coffee berry disease *Colletotrichum coffeanum*, disease control, fungicides 1341.
- leaf rust, *Hemileia vastatrix*, epidemiology, Latin America 1216.
- leaves age effects on disease resistance, leaf rust, *Hemileia vastatrix* 4976.
- rust, *Hemileia vastatrix*, epidemiology 5015.
- rust, mathematical models, incidence *Hemileia vastatrix* infection 2150.
- seedlings, disease resistance mechanisms, *Colletotrichum coffeanum* 479.
- Coffea canephora**, disease resistance, leaf rust, *Hemileia vastatrix*, light intensity effects on 3962.
- leaf rust, *Hemileia vastatrix*, disease resistance, detection, methodology 2261.
- Coffea**, fermentation, fungi, waste treatment, wastewater treatment, digestion (anaerobic), composting 4432.
- Coffea berry disease**, *Colletotrichum coffeanum*, disease control, fungicides, *Coffea arabica* 1341.
- Cogomycin**, *Streptomyces*, comparison, fungichromin, lagosin, physicochemical properties, biological properties 2591.
- Colch lachryme-jobi**, Ustilago colicis smut incidence, Thailand 5770.

- hicine**,
hiction, Aureobasidium pullulans pullulan biosynthesis 8336.
hirdiness,
hrium aestivum, barley yellow dwarf virus infection effects on 9343.
storage,
bles, effects on scab pathogenesis 3105.
cteria growth, packaging, liver, tongue, beef 267.
lef, hot-boning, bacteria contamination 244.
ast milk, bacteria contamination 214.
ad contamination, microorganisms 242.
ad, preservation, association lactic acid bacteria 260.
ik, bacteria contamination, growth 4827.
ik, dissolved oxygen, growth, psychrotrophic bacteria 239.
ckaging, poultry, spoilage 4881.
ultry, lactic acid bacteria spoilage, cold storage, packaged food, carbon dioxide, oxygen 6686.
rvival, phages, lactic acid bacteria 8103.
emperature, effects on growth, coliforms, yeasts, butter 8465.
tolerance,
il microorganisms, bacteria 9552.
optera,
urgitation factors, role, transmission, tobacco mosaic virus, southern bean mosaic virus, bean pod mottle virus, tobacco ringspot virus, Vigna unguiculata 6733.
optile,
ordum vulgare, penetration, powdery mildew, Erysiphe graminis f.sp.hordei 3947.
ordum vulgare, Rhizoctonia solani, penetration 2132.
salaw,
ctors affecting, Saccharomyces dairenensis, Saccharomyces exiguus, food spoilage 6733.
cin M,
ects on murein biosynthesis, Escherichia coli 2465.
cin V,
roduction, Escherichia coli, animal isolates 3431.
cins,
cherichia coli, outer membranes, proteolytic enzymes, activity 1914.
cherichia coli, production, proteolytic enzymes biodegradation association 4397.
roduction, Shigella sonnei, antibacterial activity, Escherichia coli 669.
forms,
rosols, wastewater treatment, indicator species 9796.
alysis, water springs 9815.
imal isolates, antibiotic resistance, salinomycin feeding, chickens effects on 3289.
ibiotic resistance, detection, sea water 7902.
ibiotic resistance, sewage treatment, urbanization, effects on 7879.
ese, organoleptic evaluation 7584.
ntamination, drinking water, livestock 8975.
ntamination, mineral water, bacteria 2027.
ntamination, rivers, Yugoslavia 2620.
ntamination, Saccharomyces cerevisiae, acetic acid reduction 4773.
ntamination, water quality, association ditis externa, epidemiology, man 2630.
ntamination, water supplies, waterborne diseases epidemiology 8967.
m-animal wastes silage, fermentation, biochemical characteristics 4868.
pectants, antibacterial activity, orthophenylphenol, paraformaldehyde, calcium oxide 8982.
inking water, incidence, mathematical models 3484.
inking water, media (isolation) 3569.
inking water, membrane filtration, enumeration efficiency 3587.
umeration, sea water, media comparison 9956.
ses, indicator species enumeration, water sampling, light effects on 2625.
ses, man, water resources, quantification 5322.
contamination, dairy products, confectionery 9276.
od contamination, enumeration equipment 3575.
od contamination, ice cream 6659.
od contamination, ice cream 7567.
od contamination, sausages, detection methodology 4419.
ormycin derivatives antibacterial activity 8890.
rowth, cold storage temperature effects on, butter 8465.
ntification, characterization, drinking water contamination, tropical environment 8978.
icator species, bactericidal activity, oil pollution, pollution effects 1550.
icator species, counting methods, membrane filtration 2671.
icator species, microbial pollution, sediments, coastal waters 8065.
icator species, microbial pollution, sewage outfalls 3482.
icator species, vegetables, freezing effects on 8668.
lates, sewage effluents, antibiotic resistance, transfer, Escherichia coli 336.
lation methodology, soil, titration use 8144.
els, Brazil rivers 8066.
embrane filtration, enumeration agar 3568.
robal pollution, rivers, hydrology 1724.
robal pollution, sewage effluents, sea water 3481.
robal pollution, surface water 1708.
robal pollution, wells, public health, man, Nigeria 8067.
ultry isolates, antibiotic resistance 7030.
overy, dairy products, food contamination 4817.
overy, media (enrichment), skim-milk 218.
uction, composting, sewage sludge 8938.
IA phages, typing, sewage sludge, Africa 6269.
ertility effects on 7798.
ilage, meat products, storage effects on taste panel evaluation 4771.
aces contamination, institutions, children 3494.
vival, freezing, vegetables 2026.
vival, soils (sandy), septic tanks association 1693.
ter pollution, viruses, sewage outfalls 796.
tin,
sensitivity, bacteria, urinary tract isolates 8813.
tins,
ntation, chromatography 4417.
is,
stridium difficile, diagnosis methodology, feces Gram stain 9940.
undodiagnosis, Clostridium difficile cytotoxins, feces, counter immunoelectrophoresis, man 9306.
donus montanus,
anase transmission, X disease, Mollicutes, Prunus 4973.
Collagen,
hydrolysis, factor affecting, actinomycetes soil isolates 7562.
proteolysis, Clostridium histolyticum collagenase 6412.
Collagenase,
Clostridium histolyticum, purification, substrate specificity, collagen proteolysis 6412.
Collar rot,
Phytophthora cactorum, fumigants disease control, Malus pumila 492.
Phytophthora cactorum, Malus pumila, metalaxyl effects on pathology 505.
Colletotrichum,
grazing effects on, nitrogen, cations leaching, fungi mycelia, leaf litter decomposition 3212.
Colletotrichum,
 α -amylase, hemicellulase, production 6404.
fruit rot, Lycopersicon esculentum 6807.
infection, blueberries, post-harvest decay, disease control, carbon dioxide storage 3106.
invasion, Trifolium repens 5692.
pathogenicity, fruit rot, Lycopersicon esculentum 1301.
Colletotrichum acutatum,
plant diseases, Tsuga heterophylla seedlings, new records, Canada 7783.
post-harvest decay, storage, Carica fruits 7719.
Colletotrichum atramentarium,
pectinase, fruit rot, Lycopersicon esculentum 5797.
Colletotrichum capsae,
infection, Vigna radiata, biodegradation, seed-borne diseases 3915.
seeds, fungicides effects on, Capsicum annuum 5832.
Colletotrichum circinans,
infection, Allium cepa, fluorescence association, factors affecting 8584.
Colletotrichum coccodes,
plant diseases, roots, crops, greenhouse, USA, North Carolina 9411.
root rot, fungicides disease control, Lycopersicon esculentum, Solanum melongena 6872.
Colletotrichum coffeanum,
antifungal activity, N-benzylthiocarbamic acid derivatives 9678.
coffee berry disease, disease control, fungicides, Coffea arabica 1341.
disease resistance, inheritance, Coffea arabica 6864.
disease resistance mechanisms, seedlings, Coffea arabica 479.
infection, Coffea arabica, pathogenesis, association Glomerella cingulata 9379.
Colletotrichum dematium,
leaf blight, Abelmoschus esculentus, pathogenesis 9412.
Colletotrichum dematium var. truncata,
benomyl, antifungal activity 2285.
Colletotrichum falcatum,
condia survival, soil 4198.
spore germination, iprodione, thiophanate methyl, effects on 7765.
Colletotrichum fragariae,
anthracnose, disease resistance, screening, Fragaria 1258.
infection, Fragaria vesca, histopathology 422.
Colletotrichum gloeosporioides,
anthracnose, Coffea, Cuba 2183.
anthracnose, Coffea, Cuba 3910.
anthracnose, cutinase, activity, Carica papaya, pesticides (organophosphorus), effects on 8563.
anthracnose, pathogenesis, electron microscopy, Carica papaya 8564.
leafspot, anthracnose, Fragaria 9425.
Mangifera indica, drug resistance, fungicides 1532.
pectinolytic enzymes 5528.
post-harvest decay, 1-octoxy-2-hydroxy-4-oxo-heneicos-12,15-diene, antifungal activity, Persea americana 2471.
rot, Crassulaceae leaves, detection methodology 9447.
weed control, Hakea sericea, field trials 9408.
Colletotrichum gloeosporioides f.sp. aeschyromene,
biological control, Aeschynomene virginica, weed control, Oryza sativa 6630.
survival, Oryza sativa irrigated areas, water, soil 1189.
weed control, Aeschynomene virginica 2835.
latent infection, Carica papaya, pathology 6788.
Colletotrichum glycine,
benomyl, antifungal activity 2285.
Colletotrichum graminicola,
anthracnose, Avena sativa 7670.
anthracnose, Zea mays, Orthoporus role 369.
infection, Sorghum vulgare, association, pollen 3940.
infection, Zea mays, disease resistance, comparison, Bipolaris maydis infection 4069.
spores, application, Zea mays, leaves, methodology, humidity 9081.
survival, Zea mays, crop residues 3946.
Colletotrichum lagenarium,
disease resistance induction, Cucumis sativus, Fusarium oxysporum f.sp.cucumerinum wilt 465.
hyphal tips, tricyclazole effects on, pigmentation, plants penetration 325.
induction, disease resistance, Pseudomonas lachrymans, Cucumis sativus 3124.
infection, Cucumis melo, effects on lignin biosynthesis 3097.
infection, Cucumis melo, ethylene effects on glycoproteins accumulation, cell walls 3981.
infection, Cucumis sativus, disease resistance induction 444.
Colletotrichum lindemuthianum,
anthracnose, disease resistance, phytoalexins, Phaseolus vulgaris 1360.
anthracnose epidemiology, Phaseolus vulgaris, Canada 4933.
anthracnose, Phaseolus vulgaris disease resistance 5815.
chitin deacetylase, purification, characterization 6461.
disease resistance, genetic variance, Phaseolus vulgaris 6863.
infection, hypersensitive response, leaves proteins 1333.
peptide mapping 925.
Zea mays, pollen, enhancement, infection, Vigna unguiculata 327.
disease resistance, Phaseolus vulgaris 4068.
Colletotrichum malvarum,
weed control, Sida spinosa 1285.
Colletotrichum musae,
benomyl, antifungal activity 2285.
infection, Musa sapientum, appressoria, development 5733.
Colletotrichum trifolii,
anthracnose, disease resistance, Medicago sativa 5046.

Subject Index

Colletotrichum trifolii, (continued)

host range, Leguminosae 139
infection, screening disease resistance, races, *Medicago sativa* 477.
polysaccharides, in vitro biosynthesis, phytotoxicity 353.

Colletotrichum truncatum,

anthracnose, effects on, yield, *Glycine max* 1137
herbicides stimulation fruits, *Glycine max* 5821.

Collybia butyraceae,

biodegradation, forest floor litter, *Abies alba* 1442.

Collybia distorta,

biodegradation, forest floor litter, *Abies alba* 1442.

Collybia maculata,

biodegradation, forest floor litter, *Abies alba* 1442.

Collybia velutipes,

protoplasts formation, methodology 8166.

Colombia,

Triticum aestivum, incidence, *Pyrenophora tritici-repentis* spot 9356.

Colonial characteristics,

association antibiotic resistance, *Serratia marcescens* 4283.

Bordetella pertussis, antibiotics effects on 1596.

Proteus 657.

Rhizobium isolates, *Cajanus cajan*, *Cicer arietinum* 7821.

Colonies,

counting methods, use, hydrophobic grid+membrane filtration 8138.

diameter, growth, *Mycoplasma*, statistical analysis 8109.

microorganisms, enumeration methodology, association, food contamination control 3585.

Colonization,

leaf litter, fungi 3771.

mesophilic fungi, straw, *triticum*, *Vicia faba*, composting 3781.

soil microorganisms, *Cochliobolus sativus*, conidia, hyphae, fluorescence microscopy 3625.

Staphylococcus, catheters, growth 2638.

thermophilic fungi, straw, *Triticum*, *Vicia faba*, composting 3780.

vesicular-arbuscular mycorrhizas, symbiosis, Gramineae, *Pisum sativum* 5902.

Colony-forming cells,

bacteria, growth, multiplication, soil, mathematical models 2345.

Color,

removal, industrial effluents, pulp mills, paper mills, use, *Coriolus versicolor* 5811.

seeds, relationship, lesions, *Septoria glycines* brown spot, *Glycine max* 5684.

tissues, calcium chloride preservatives, association, viruses infection, plants 2093.

Coloration,

melanoidin, removal, use, *Coriolus versicolor* 150.

wine, yeasts new records, chemical properties, mutations effects on 7511.

Colorimetry,

broasays, quantitation, respiratory syncytial virus, defective-interfering particles 7230.

chlorhexidine gluconate levels, contact lenses cleaning systems 4324.

Gloeophyllum trabeum, cell walls, chitin, methodology 8157.

peptidase, *Candida albicans* 6542.

Colostrum,

cattle, *Streptococcus lactis* fermentation effects on proteins 246.

+milk, lactic acid bacteria, fermentation, food sources, juveniles, cattle 7599.

Columba,

feces, association, *Cryptococcus neoformans*, contamination, public health 4457.

manure, and media (isolation), *Cryptococcus neoformans* 8154.

Column chromatography,

Amarantus muscatus pigments 2849.

cephalosporin C 3422.

coagulation factor VIII purification, use, hepatitis B virus antigens 3542.

+detergents, anaerobic conditions, methodology, fractionation *Pseudomonas hydrocyanica* acid production enzymes 4505.

peptidase, *Candida albicans* 6542.

purification, influenza A virus 7225.

Columnae,

Corynespora casicola leafspot 2192.

Colyatin,

Bacteroides fragilis antibiotic sensitivity testing 7130.

Combined vaccines,

antibody response, dogs 3449.

Commercial species,

marketing, bacteria, biological control, Insecta 1021.

Commiphora mukul,

extracts, antiviral agents, vaccinia virus 3343.

Common bean mosaic virus,

infection, yield, productivity, growth rate, *Pisum sativum* 8539.

Community composition,

fungal flora, seasonal variations, crop fields, *Brassica campestris* 9546.

fungal flora, soil microorganisms, deserts, Kuwait 8673.

soil microorganisms, organic matter decomposition, coal mines 5914.

soil microorganisms, soil properties 8663.

soil microorganisms, soils (saline), soil chemistry 7819.

Community structure,

bacteria, mines, drainage, effects on, lakes 8068.

bacteria, soil, species diversity, Pahoehoe muck, enzymatic activity, respiration 5912.

trophic relations, forests, steppes 1448.

Comovirus,

host range, pathogenicity, crops 2172.

Compactin,

hydroxylation, *Mucor hiemalis*, 3 α -hydroxycompactin biosynthesis 8872.

Mucor hiemalis, hydroxylation 7552.

Competition,

Claviceps purpurea sclerotia, infection, *Sesale cereale* seeds, photosynthesis carbon sources 374.

denitrifying bacteria, reviews 5110.

evolution, Uredinales 6784.

Glycine max, non-infected, comparison soybean mosaic virus infection, yield 6740.

nutrient availability, environmental stress, sclerotia germination, fungi, soil 9573.

Rhizobium melioli strains, association, nodulation, *Medicago sativa* 7857.

Rhizobium mutants, *Cicer arietinum* 7854.

Competition, (continued)

Rhizobium phaseoli strains, nodulation, Leguminosae 4245.

Rhizobium trifolii, nodulation, *Trifolium subterraneum* 5116.

saprophytes, soil pH, soil temperature, fungicides, herbicides, soil moisture, *Fusarium udum* 5694.

tobacco mosaic virus strains, infection, *Nicotiana sylvestris* 9449.

Competitiveness,

Rhizobium leguminosarum, nodulation, *Lens esculenta* 3235.

Rhizobium trifolii, *Trifolium repens* soil microorganisms, factors affecting 611.

Complement fixation,

characterization, influenza virus, antibodies, methodology 9863.

diagnosis, brucellosis, cattle 4485.

immunoglobulin G, detection, cytomegalovirus 5375.

Complementation,

genetic analysis, gene mapping, melanins deficient mutant, association *Gossypium* wilt, *Verticillium dahliae* 6796.

Compositae,

seeds, fungal flora 7726.

Composting,

aeration, sewage sludge 8937.

equipment, laboratories, activity 8951.

industrial wastes, land disposal, reviews 6242.

mechanisms, microorganisms role, reviews 6249.

polycyclic aromatic hydrocarbons, biodegradation 2875.

sewage sludge, pathogens reduction 8533.

sewage sludge, thermophilic microorganisms 6253.

solid wastes, urban environments, biological activity effects on microflora evolution 8942.

straw, *triticum*, *Vicia faba*, mesophilic fungi colonization 3781.

straw, *triticum*, *Vicia faba*, thermophilic fungi colonization 3780.

waste treatment, association, physicochemical properties, reviews 7191.

waste treatment, coffee fermentation 4432.

wastes, C/N ratios association 4448.

Composts,

Agaricus bisporus cultivation, reviews 9281.

Arachis hypogaea shells, effects on soil microorganisms, organic compounds, soil (sandy) 5133.

bark, inhibition soil-borne diseases, plants 3122.

cattle manure, enzymatic activity, microflora, association 8061.

Egypt, waste disposal 2604.

enrichment, *Azotobacter chroococcum* + *Aspergillus awamori* 7799.

indicator species, bacteria, factors affecting survival 6252.

levels, gram-negative bacteria, *Aspergillus fumigatus*, endotoxins 5292.

production, *Saccharum bagasse*, microorganisms decomposition activity 7560.

sewage sludge, thermophilic bacteria, distribution, actinomycetes 5312.

straw, microorganisms biomass, association, *Agaricus bisporus* nutrition 2923.

Compound Al-77s,

Bacillus pumilus, analogs, structure 6627.

Compound M-9337,

Streptomyces antihemolyticus, biosynthesis, isolation, physicochemical properties, biological properties 8365.

Compound U-57930E,

antibacterial activity, anaerobic bacteria 4379.

Compound 48/80,

antimicrobial activity, mechanisms association cell membranes 5225.

Computer applications,

antibiotic sensitivity testing, bacteria 9739.

Candida brassicae continuous culture, biomass production 8167.

carbon dioxide monitoring, fermentors 5361.

clinical microbiology, bacteria 3593.

control, fermentation 1987.

culture collections, data processing, computer programs 5391.

diagnosis identification, *Glycine max*, USA, Illinois 4942.

ethanol fermentation, yeasts 9228.

fermentation analysis 5239.

fermentation control 4467.

fermentation, monitoring 5362.

fungi growth monitoring, penicillin fermentation, media (culture) 9754.

fungi growth monitoring, penicillin fermentation, media (culture) 9755.

genetic control, *Triticum aestivum* disease resistance, leaf rust, USA, North Dakota 7730.

Lipomyces starkeyi batch culture, lipids production 7496.

monitoring, fermentation, conferences 5456.

most probable number 9829.

neutralization, bioassays, herpesvirus 7229.

penicillin fermentation models, filamentous microorganisms 9756.

predictions, *Alternaria solani* early blight, *Lycopersicon esculentum*, USA 4011.

spectrofluorometry, influenza virus, methodology 8107.

Staphylococcus aureus protoplasts fusion, gene mapping 4508.

Streptococcus identification, gas chromatography 2672.

taxonomy (numerical), bacteria 9887.

video image analysis, measuring techniques, leaves lesions, plant diseases 4924.

Computer programs,

Capnocytophaga taxonomy, identification keys 843.

culture collections, computer applications, data processing 5391.

taxonomy (numerical) microorganisms, proteins electrophoresis 8091.

Computers,

data processing, fermentors 9004.

Conalbumin,

antibacterial activity, microflora 5181.

antibacterial activity, relationship microflora immune response, Mammalia, reviews 5176.

Concanamycins,

structure, *Streptomyces diastatochromogenes* 3448.

Concanavalin A,

methodology, detection, Lassa fever virus, Japanese encephalitis virus, glycoproteins 3541.

Concrete,

walls corrosion, sewers, *Thiobacillus* enumeration, Germany, Fed. Rep. 7537.

Condensation,

relationship, *Diplodia pinea* infection, *Pinus radiata* seedlings 7786.

relationship, *Pinus contorta* subsp. *latifolia*, blister rust effects on 4169.

Confectionery,

dairy products, food contamination, coliforms, fecal coliforms 9276.

- erences,**
inoglycoside antibiotics, clinical aspects, bacteria antibiotic resistance 3366.
icillin, antibacterial activity 9099.
icillus megaterium penicillin amidase, activity mechanisms 9159.
cteria biodegradation, industries 4753.
cteria biodegradation, industries, history 4754.
cteria biodegradation, industries, preservatives, bactericides use 4755.
cteria biodegradation, water supplies, industries 4756.
cteria food contamination, microbial pollution, drinking water, indicator species 5454.
cteria, fungi, biodegradation 2729.
cteria, nitrogen fixation, plasmids transfer 5452.
cteria, nitrogen, fungi, bacteria, books 10004.
geochemistry, books 2729.
logical control, pest control, pathogens 1819.
logical control, soil suppression, plant diseases 1818.
mass conversion, ethanol production, sugars fermentation 10010.
mass production, utilization, books 10009.
oks, antibacterial agents, antiviral agents, chemotherapy, man, activity, in vitro 6364.
oks, Basidiomycetes, decomposition, ecology 8187.
lotaxime antibacterial activity 6362.
ical microbiology, microbiology, ecology, genetics, fermentation 909.
icazole antibacterial activity 5367.
ital caries, prophylaxis, treatment, oral hygiene, man 8189.
ease resistance, plant breeding, genetic analysis, plant diseases 7278.
cherichia coli enterotoxins biosynthesis, media (culture) methodology 9881.
ds, contamination, bacteria, fungi, mycotoxins 5455.
mentation, computer applications, monitoring 5456.
menters design 9100.
ed contamination, bacteria, fungi 5453.
ed vacuum packaging, food contamination 5460.
ngi detection, biodegradation, industries 4757.
ngi, plant diseases, fungicides resistance 2730.
ustrial microbiology 5459.
zocillin, antibacterial activity 6365.
robiology 6370.
robiology 8190.
roorganisms biodegradation, industries 5457.
roorganisms, drugs production models, Mammalia metabolism 7467.
lk, bacteria, food contamination 5458.
coplasmatas, pathogenicity, plants 6363.
oornhizas, nutrient uptake 10005.
rogen content, soil, measuring techniques, books 9098.
rogen cycle, aquatic ecosystems, terrestrial ecosystems, factors affecting 908.
rogen fixation, Cyanophyta, Rhizobiaceae 6361.
rogen fixation, nitrogen-fixing bacteria, rhizosphere 10008.
rogen-fixing bacteria, Leguminosae nodulation 7004.
nt diseases 910.
nt diseases 1820.
nt diseases 3638.
nt diseases 3639.
nt diseases 6369.
nt diseases 10003.
nt diseases, viruses, bacteria, fungi 7280.
wage sludge, effects on, soil properties, books 8188.
wage sludge, pathogens, disinfection 9096.
gle-cell protein 10006.
i microorganisms, agricultural practices, mycotoxins 6368.
uses, plant diseases 2728.
stewater treatment, books 9097.
asts, fermentation, ethanol 3840.
stria enterocolitica enterotoxins, purification, characterization 9298.
dia.
perillus parasiticus aflatoxins, *Aspergillus flavus*, *Aspergillus parasiticus* 2948.
apoglia bassiana, foliar application, *Solanum tuberosum* leaves, pathogenicity, leproptera decemlineata, bioassays, biological control 7482.
olaris sorokiniana, identification, soil isolates 7806.
lytix cinerea, penetration structure, *Phaseolus vulgaris* 9332.
oliobolus sativus, soil microorganisms colonization, fluorescence microscopy 6625.
chliobolus vitreae, germination, nutrient availability, fungistasis, soil 9572.
lotritochium falcatum, survival, soil 4198.
lcarbon roses, nitrogen (liquid) storage, culture collections 3629.
ria neogheids, biological control, Aphididae 8361.
sipse graminis f.sp. hordei infection, dispersal, *Hordeum vulgare*, Denmark 1128.
i, chlorine effects on 2475.
mination, *Mena coniospora*, fixation, potassium permanganate use 4519.
trathizium anisopliae, viability, characterization, biological control, *Culex pipiens* 7479.
ase, Botrytis squamosa, *Allium cepa* blight, weather relationship 5771.
ge germination, *Cryptonecra cubensis*, *Eucalyptus* phenols effects on, role, disease resistance, canker 5814.
res, environmental conditions, pest control, Entomophthorales, biological control 1009.
viral, pathogenicity, *Botrytis fabae*, *Vicia faba* 5677.
viality, *Metarrhizium anisopliae*, storage conditions, effects on, virulence, *Culex pipiens* 7480.
vity, *Metarrhizium anisopliae*, temperature, relative humidity, effects on, virulence, *Culex pipiens*, *Anopheles stephensi* 7478.
liobolus,
nification, enzymes, API test 899.
ne protease, biosynthesis, activity, characterization 8304.
liobolus lamprages,
in binding hemagglutinins, purification, immunological aspects 6386.
liobolus obscurus,
ogical control, Entomophthorales, conidia, spores, survival, environmental conditions, Insecta 1009.
ing spores spore germination, fungicides effects on 7762.
liocarpus penzigi,
ction, plants, pathogenesis, host range 3992.
- Coniella granati,**
leaf blight, fruit rot, *Punica granatum* 7680.
Coniferales,
butt rot, *Heterobasidion annosum*, *Sparassis crispa*, *Calocera viscosa*, pathology 4179.
ectomycorrhizas ultrastructure 533.
forests, litter decomposition, role, fecal microflora, *Clethrionomys* 1449.
forests, soils (acid, nitrification, *Nitrobacter* 1446.
Laccaria laccata, effects on, growth 532.
leaf litter decomposition, bacteria, carbon, nitrogen production, association, climate 2021.
Phytophthora, pathogenicity 5073.
Coniophora puteana,
chemotropism, association, wood volatiles 3765.
USA mines forest products biodegradation 7792.
Coniothyrium fuckelii,
canker, *Rosa*, disease control, fungicides 1410.
Conjugate,
plasmids, analysis, *Staphylococcus aureus* gentamicin antibiotic resistance 8738.
Conjugation,
R factors, hexachlorophene drug resistance, *Escherichia*, *Salmonella*, *Pseudomonas* 6030.
R factors, incompatibility, identification methodology 3551.
phages, *Escherichia coli* toxins gene transfer, toxicity, laboratory animals, domestic animals 9315.
Staphylococcus, plasmids, drug resistance, gentamicin 3273.
Vibrio anguillarum, plasmids, drug resistance, conjugation 6015.
Contact lenses,
cleaning systems, chlorhexidine gluconate levels, colorimetry 4324.
hydrogen peroxide, preservatives, antifungal activity, *Candida* 709.
Contagious equine metritis,
bacteria isolation, media (selective), horses 862.
Containers,
dentures, pathogens isolation, cancer patients 3506.
Contamination,
aflatoxin B1, gram 7616.
aflatoxin B1, *Spodoptera frugiperda* pest outbreaks, drought effects on, *Zea mays* 4887.
aflatoxin M1, levels, cheese, ripening effects on 280.
aflatoxin M1, levels, ripening, cheddar cheese 281.
aflatoxin M1, levels, ripening, cheese 282.
aflatoxins, corn, association, water content, assays, USA, South Carolina 9291.
aflatoxins, corn feeds, rats 8494.
aflatoxins, milk, milk products, reviews 283.
aflatoxins, peanuts 3870.
aflatoxins, standards, reviews 2942.
aflatoxins, *Zea mays*, breeding effects on 3880.
analysis methodology, association, bacteria culture, freeze-drying 2684.
animals feeds, bacteria, fungi, mycotoxins, conferences 5455.
aquifers, bacteria, methanogenesis, phenol 4450.
Arachis hypogaea, aflatoxins, factors affecting 2941.
Arachis hypogaea, *Aspergillus flavus*, aflatoxins, factors affecting 2988.
association, *Cryptococcus neoformans*, Columbia, feces, public health 4457.
bacteria, antibiotics fermentation, *Penicillium*, *Streptomyces*, detection, *Bacillus* test 8824.
bacteria, bedding, hospitals 1731.
bacteria, beef, hot-boning, cold storage, abattoirs 244.
bacteria, breast milk, pasteurization, cold storage 214.
bacteria, enterovirus immobilization bentonite, ethanol bactericidal activity 3523.
bacteria, feeds, domestic animals 248.
bacteria, fishery products, Kenya 3837.
bacteria, fungi, control, preservatives, antibacterial activity, antifungal activity 4320.
bacteria, growth, beef, packaging 285.
bacteria, growth, milk, cold storage 4827.
bacteria, growth, milk, storage, dairies 4832.
bacteria, injectable vials, medical equipment, cost-benefit analysis 9822.
bacteria, milk, food quality, storage 4837.
bacteria, milk, milking machines 4823.
bacteria, milk, organoleptic evaluation, standards 4839.
bacteria, milk, packaging, pasteurization 8500.
bacteria, milk, quality control 4834.
bacteria, milk, sanitation, milking machines 5341.
bacteria, pathogens, milk 4818.
bacteria, poultry, counting methods, factors affecting 190.
bacteria, poultry, counting methods, factors affecting 190.
bacteria, respirators, medical equipment, nosocomial environments 9823.
bacteria, sampling methodology, carcasses 2028.
bacteria, standards, milk 4824.
bacteria, teeth, man, dentistry instruments 2643.
bacteria, tissues damage, organoleptic evaluation, beef, mutton 181.
bacteria, vaccinia virus samples, phenols elimination 2657.
bacteria, water disinfection, cleaning systems, milking machines 5342.
bacteria, yeasts, fungi, growth, ham, smoking, curing 180.
beer, hops, aflatoxins 2937.
beer, *Penicillium crustosum* alkaloids mycotoxins production 8503.
bottles, mineral water, bacteria 2027.
bread, *Aspergillus fumigatus* mycotoxins, food poisoning, man, neurological complications 2947.
Campylobacter fetus subsp. jejuni, *Salmonella*, meat, public health surveys 1081.
Campylobacter fetus subsp. jejuni, turkeys, milk 4787.
cheddar cheese starter cultures, milk, pages 4804.
chickens, *Salmonella*, abattoirs 4845.
Clostridium botulinum 2031.
Clostridium botulinum, honey, infants food 2031.
coliforms, fecal coliforms, drinking water, livestock 8975.
coliforms, *Saccharomyces cerevisiae*, acetic acid reduction 4773.
cooling water, *Legionella pneumophila*, detection methodology 3474.
cooling water systems surfaces, bactericides, nutrient availability effects on bacteria 4451.
cotton, gram-negative bacteria 1320.
cotton, gram-negative bacteria, endotoxins 5659.
Crassostrea virginica, *Mercenaria campechensis*, *Escherichia coli*, relationship, *Salmonella* 2042.
crops, leaves, poliovirus, adenovirus, recovery methodology 1767.

Subject Index

Contamination, (continued)

- drinking water, bacteria, Egypt, rivers 2618.
- drinking water, coliforms identification, characterization, tropical environment 8978.
- drinking water, hepatitis A virus, epidemiology, hepatitis A, man, USA, Pennsylvania 7202.
- drinking water, parasites, Egypt, rivers 2619.
- endotoxins, enzymes, enzyme-linked immunosorbent assay 9826.
- Escherichia coli, antibiotic resistance, identification 8728.
- feeds, bacteria, fungi 4861.
- feeds, chickens, association *Aspergillus flavus* cyclopiazonic acid biosynthesis 8512.
- feeds, fungi, mycotoxins, cattle sterility 4890.
- feeds, Fusarium, assays 4863.
- feeds, high-performance liquid chromatography, mycotoxins 4893.
- feeds, microorganisms, toxins, quality control 4862.
- feeds, mycotoxins, pigs, mycotoxins 4895.
- finger, man, *Salmonella* carriers 2703.
- food industry, sugars, bacteria, fungi 184.
- food, water, sewage, public health, man 5285.
- Fusarium moniliforme air spora, Asparagus flowers 9414.
- goats meat, frozen foods, *Bacillus cereus*, *Staphylococcus aureus*, *Streptococcus* 5606.
- Gramineae, mycotoxins 5651.
- Hordeum vulgare, ochratoxin A, *Aspergillus ochraceus*, kidney, lesions, pigs 7622.
- hospitals water supplies, *Legionella pneumophila* 1719.
- infants food, *Bacillus cereus*, *Staphylococcus*, toxicogenicity 8464.
- Lactobacillus* casei, cheese production 9274.
- meat, bacteria 5622.
- meat, bacteria, surveys 223.
- meat, prevention, water chlorination 7611.
- medical dressings, *Bacillus*, fungi, *Micrococcus*, *Propionibacterium* 8073.
- microorganisms, association, food packaging, plastics 1094.
- microorganisms, media (culture), use, biosynthesis, antibiotics 8803.
- milk, anaerobic bacteria, spores 4829.
- milk, bacteria, teats washing effects on, cattle 5350.
- milk, sanitation, udder microflora, cattle 5339.
- milk, sources, spore-forming bacteria 4812.
- milk, udder microflora, cattle 4820.
- mycotoxins, association feeds hygiene 4889.
- mycotoxins, *Sorghum bicolor* 6703.
- nitrate-reducing bacteria, animals feeds, yeasts production 1085.
- ochratoxin A, *Aspergillus ochraceus*, *Hordeum vulgare*, detoxification, feeding, pigs 7623.
- oil, Desulfotribio, polyacrylamide effects on 5141.
- pathogens, houses, bacteria 4500.
- peanuts, aflatoxins, quality control 2940.
- Pediococcus, breweries, industrial water systems, bactericides control 8966.
- petroleum, microorganisms, analysis 5139.
- petroleum, microorganisms, sulfate-reducing bacteria, *Cladosporium resinae* 5140.
- poultry carcasses, *Salmonella* serotypes 8485.
- psychrotrophic bacteria, gram-negative bacteria, cream, pasteurization 8499.
- psychrotrophic bacteria, lipase, butter, off flavor 209.
- psychrotrophic bacteria, spore-forming bacteria, milk, buffaloes 7578.
- Pythium, association, *Phytophthora megasperma* f.sp.glycinea, isolation methodology 589.
- rivers, *Escherichia coli*, coliforms, pathogens, Yugoslavia 2620.
- Salmonella*, fertilizers, organic compounds 1732.
- Salmonella*, oysters 9267.
- seafood, frog legs, *Salmonella* matopeni, *Salmonella* cerro 188.
- sealcanic acid D, corn dust 279.
- serological tests reagents, quality control, bacteria, viruses 5229.
- sewage treatment plants, *Salmonella*, occupational hazards 1730.
- soaps, microorganisms 5641.
- source, bottles sterilization, wineries 258.
- Staphylococcus aureus*, growth, beef, packaging 272.
- surfaces, coliforms, institutions, children 3494.
- tablets, microorganisms, pressure effects on 3459.
- Tilletia controversa* spores, grain, *Triticum aestivum* 1329.
- tobacco, fungi, bacteria 438.
- 2,4,5-trichlorophenyl acetate, soil, biodegradation, *Pseudomonas cepacia* 4750.
- Triticum aestivum*, *Aspergillus flavus* aflatoxins 3872.
- vaccines, fungi, antibiotic resistance, drug resistance, characterization 2396.
- viruses, surface water, German Dem. Rep. 3477.
- waste water, *Bacillus subtilis*, U.V. radiation disinfection 3472.
- water, enterovirus filtration methodology 3520.
- water quality, bacteria, association otitis externa, epidemiology, man 2630.
- Xiphias gladius, fishery products, packaging, *Lactobacillus*, *Pseudomonas*, chemistry 4808.
- zearalenone, assays, corn, feeds 5644.

Continuous culture.

- Aspergillus phoenicis*, β -glucosidase, production 3672.
- Azotobacter vinelandii*, *Candida lipolytica*, sea water 8069.
- Bacillus subtilis*, α -amylase production 2794.
- Brevibacterium ammoniagenes immobilized cells, coenzyme A biosynthesis 1944.
- Brevibacterium flavum, lysine biosynthesis 2747.
- Candida guilliermondii*, association, pH, temperature 2725.
- Candida guilliermondii*, paraffin metabolism 2390.
- Candida utilis*, ethanol metabolism, biomass yield, oxygen effects on 7509.
- Clostridium acetobutylicum*, production, acetone, butanol 1037.
- ethanol fermentation 8404.
- Kluyveromyces fragilis*, inulinase production, carbon sources effects on 2813.
- reactors, nitrifying bacteria, wastewater treatment, dissolved oxygen effects on 1705.
- Saccharomyces cerevisiae*, cytochrome P450 1300.
- Saccharomyces cerevisiae*, oxygen uptake measuring techniques 900.
- Streptococcus mutans*, glucosyltransferase, fructosyltransferase, production 972.
- Streptomyces hygroscopicus*, funnyimycin, biosynthesis, genetic analysis 762.
- Tetrahymena pyriformis*, predator-prey interactions, *Escherichia coli*, attachment 2673.
- Thermus aquaticus*, growth, media (culture) 2691.
- Vibrio cholerae*, *Vibrio mimicus*, enterotoxins biosynthesis, recycling 8517.

Control programs.

- dental plaque, man 3507.

Control programs, (continued)

- salmonellosis, food contamination, man 230.

Convulvulaceae.

- roots, weeds, susceptibility, fungi infection 9394.

Convulvulus curvivalis.

- weed control, biological control, fungi, surveys 414.

Cooking.

- bacteria, food contamination, kitchens 235.
- beef, bacteria survival 210.
- kitchens, pork, food contamination, bacteria 232.
- kitchens, poultry, spoilage, food contamination, bacteria 1087.
- kitchens, sanitation, food contamination, bacteria 213.
- oysters, food contamination, *Vibrio cholerae* 2912.
- pork, food contamination, *Clostridium perfringens*, *Staphylococcus aureus*, kitchens 1066.

Cooling towers.

- biocides, antimicrobial activity, *Legionella pneumophila* 5221.

Cooling water.

- British Isles, *Legionella pneumophila* incidence, antimicrobial agents effects on 1706.
- contamination, *Legionella pneumophila*, detection methodology 3474.
- industrial water systems, fouling organisms, films, bacteria 6257.
- isolates, *Legionella oakridgensis* sp. nov., characterization 3475.
- paper mills, bacteria growth, pH temperature 7201.
- systems, surfaces contamination, bactericides, nutrient availability effects on bacteria 4451.

Copepoda.

- attachment, *Vibrio cholerae*, association, epidemiology, marine environment 2622.

Copliamycin.

- structure 3445.
- synergism, imidazole, fungicidal activity, effects on membrane permeability 9679.

Copper(II).

- substitution, effects on aminopeptidase activity, *Aeromonas proteolytica* subsp. proteolytica 8277.

Copper.

- active sites, azurin coordination geometry, Raman spectroscopy, *Pseudomonas aeruginosa* 9.
- antimicrobial activity, *Entamoeba histolytica*, *Staphylococcus aureus* 2497.
- bacteria uptake, wastewater treatment 5313.
- biocumulation, activated sludge bacteria, heavy metals tolerance, wastewater treatment 6246.
- mouthwashes, retention, dental plaque inhibition, man 8998.
- nystatin complex, physicochemical properties 8867.
- pipelines, disinfection apparatus, bacteria growth 5344.
- reconstitution monophenol monooxygenase apoenzymes, kinetics, mechanisms, *Neurospora* 2762.
- sensitivity, *Xanthomonas campestris* pv. vesicatoria, association, disease control, spot, *Piper* nigrum 6878.
- soil amendment, bactericidal activity, *Escherichia coli* survival, soils (organic) 8708.
- soil amendment, sewage sludge, effects on soil microorganisms, growth 5988.
- thionein complex, *Saccharomyces cerevisiae*, reconstitution, lactase, *Rhus vernicifera* 6497.
- toxicity, nickel resistance, *Neurospora crassa* 7906.

Copper chloride.

- use, leafspot disease control, *Dioscorea dumetorum* 5061.

Copper oxychloride.

- antifungal activity, *Chaenophora cucurbitarum* 4004.
- effects on seeds microflora, *Capsicum annum* 5832.

Copper sulfate.

- foliar applications, disease control, *Citrus paradisi* greasy spot 5834.

Copper-quinolinate.

- disease control, sap stain, wood storage, *Liriodendron tulipifera*, *Pinus* 9529.
- disease control, stain, wood, *Pinus* 5882.

Coprinus.

- mutants, straw substrate, cellulose biodegradation improvements 6658.

Coprinus atramentarius.

- melanins, chemical composition, role, humus formation, soil 9218.

Coprinus comatus.

- melanins, chemical composition, role, humus formation, soil 9218.

Coprinus micaceus.

- melanins, chemical composition, role, humus formation, soil 9218.

Coproporphyrinogen oxidase.

- mechanisms, *Rhodospseudomonas sphaeroides* 4615.

Cordana martini sp. nov.

- leafspot, *Cymbopogon martini* 3985.

Cordyceps cicadae.

- galactomannans, glucans, antitumor activity, mice 7453.

Core protein.

- amino acid sequence, Semliki Forest virus 7292.
- amino acid sequence, Sindbis virus 7293.

Coriandrum sativum.

- canker pathophysiology, *Protomyces marcosporus* role 7711.
- powdery mildew, *Erysiphe polygoni*, disease control, fungicides 493.
- Rhizoctonia bataticola* infection, new records, India 3978.

Coriulus.

- enzymes, use, melanoidin coloration removal 150.

Coriolus versicolor.

- chemotrophism, association, wood volatiles 3765.
- immobilized cells, pigments removal, pulp mills, industrial effluents 8959.
- lignins biodegradation 8422.

Ignocellulose biodegradation, comparison, softwoods 170.

- USA mines forest products biodegradation 7792.
- use, color removal, industrial effluents, pulp mills, paper mills 8961.
- white rot, pruning wounds, disease control, fungicides, *Malus pumila* 6873.

Corky ringspot.

- Solanum tuberosum*, disease control 3112.

Corky root.

- Lycopersicon esculentum* 1264.

Corn.

- aflatoxins contamination, fluorescence, association, water content, assays, USA, South Carolina 9291.
- aflatoxins food contamination, detection, high-pressure liquid chromatography 3883.

- in, (continued)
- latoxins food contamination, USSR 5652.
- animal wastes sludge, fermentation, biochemical characteristics, microorganisms 4693.
- antimutation, fungi, mycotoxins, spoilage, preservation 5643.
- ust, contamination, secalonic acid D 279.
- ethanol fermentation, *Saccharomyces cerevisiae* 3811.
- eds contamination, aflatoxins, rats 8494.
- rmmentation, ethanol biosynthesis, batch culture, bacteria 134.
- od contamination, aflatoxins, airborne particulates, assays 4886.
- ng post-harvest decay, fungicides prevention, seeds viability 5029.
- neals, bacteria effects on nutritive value 251.
- ost-harvest decay, *Aspergillus*, *Penicillium*, genetic analysis 9451.
- ost-harvest decay, fungi, bacteria, sulfur dioxide effects on 6636.
- acharomycetes *cerevisiae* ethanol fermentation, factors affecting 8414.
- eat treatments, *Fusarium moniliforme*, elimination 5845.
- soybean milk, *Salmonella* sentenberg, decontamination, use, microwave radiation 3639.
- oilage, fungi, preservation, isobutyric acid, propionic acid 5626.
- orage, food contamination, *Aspergillus* 443.
- orage, spoilage, association, mycotoxins production fungi 2069.
- emperature, effects on, *Aspergillus oryzae*, fermentation, ethanol 8395.
- eralenone contamination, assays 5644.
- reals, treatment, man, relationship anesthetics antibacterial activity 9676.
- ocasia esculenta,
- lack rot, *Ceratocystis fimbriata* spores agglutination factors, isolation, characterization 4993.
- onatine,
- ynthesis, relationship, symptoms, *Pseudomonas* blight, Glycine max 2990.
- onavirus,
- mbodies, detection, enzyme-linked immunosorbent assay 9849.
- ltrimycin,
- olation, *Streptomyces longisporus* mycelia 7160.
- rosion,
- ladosponum resinae, mycelia, role, aluminum 169.
- fect, heterotrophic bacteria, role dissolved oxygen, sea water 9626.
- roxolone,
- ydroxylation, hydrocortisone biosynthesis, *Curvularia lunata* immobilized cells 3726.
- ticium fuciforme,
- fection, Gramineae, pathogenesis 3933.
- ticium salmactiarum,
- ntifungal activity, dithiocarbamates 3153.
- ticium sasakii,
- neath blight, fungicides, disease control, *Oryza sativa* 3148.
- tinarius speciosissimus,
- ushroom poisoning, renal failure, case reports, man 227.
- tinarius,
- mycorrhizas, *Eucalyptus* 1440.
- tinarius splendens,
- ushroom poisoning, man, case reports 4768.
- ydialis sempervirens,
- ssue culture, *Aerobacter aerogenes* cell culture, glyphosate resistance 8743.
- ynillus sepedonium,
- ellulase decomposition 2879.
- ynibacterium,
- ntibacterial activity, dimethyl sulfoxide+ antibacterial agents 7919.
- acteria growth, association carbon 8069.
- odegradation, odors compounds, skatole, indole, butyraldehyde 5580.
- odegradation, 6-aminoheptanoic acid 3783.
- holesterol conversion, 20-carboxy-pregna-1,4-dien-3-one production 120.
- ucose fermentation, 2-keto-L-gulonic acid production 928.
- utamic acid fermentation, growth association, relationship, carbon dioxide production 6381.
- eat resistance, dairy products, incidence 4814.
- mmobilized cells, hydroxylation, 4-androstene-3,17-dione 5655.
- ntipathogens, preservation, gels+ cold storage 2688.
- olypolyglutamate synthetase, purification, characterization 67.
- opulations, soil pH effects on, relationship, *Fusarium oxysporum* f.sp.apii, yellows, *Apium graveolens* var. dulce 5748.
- arcosine oxidase, FAD binding regions, amino acid sequence 6539.
- nnase, tannin decomposition 5600.
- onometry (numerical), computer applications 9687.
- ynibacterium aurantiacum,
- metabolism variants, ϵ -aminocaproate 3790.
- ynibacterium bovis,
- astitis, disease control, quaternary ammonium compounds, teat dips, antibacterial activity, cattle 1728.
- ynibacterium diptheriae,
- ntibacterial activity, synthetic granules 8884.
- oassays, detection staphylococci 6224.
- orescence, clinical isolate, identification 6312.
- utication, association, iron effects on toxins production 3889.
- oxins, purification, gel chromatography 8514.
- oxins structure, toxicity, reviews 6724.
- ynibacterium diamutans,
- mmobilized cells, alanine biosynthesis 9133.
- ynibacterium fascians,
- monocate dehydrogenase, lmonoids metabolism 8247.
- ynibacterium flaccumfaciens,
- asfot, Glycine max 9323.
- ynibacterium glutamicum,
- utamic acid biosynthesis, immobilized cells 16.
- sine biocynthesis, nitrogen sources 3656.
- ynibacterium inadicaum,
- mycotoxins, bioassays, *Medicago sativa* 1114.
- nit, amino acids metabolism, *Medicago sativa* 3010.
- nit, disease resistance assays, *Medicago sativa* 4063.
- ynibacterium manihoti,
- assava fermentation, linamarin synthase activity 3847.
- ynibacterium michiganense,
- fection, vegetables, plants, disease control 2267.
- ynibacterium michiganense subsp. michiganense,
- anker, *Lycopersicon esculentum*, pathogenesis, yield 8579.
- Corynebacterium michiganense* subsp. *tesellaris*,
- mosaic disease, *Triticum aestivum* 4966.
- Corynebacterium pseudodiphthericum*,
- media (culture) 5418.
- Corynebacterium pseudodiphtheriticum*,
- bioassays, detection staphylococci 6224.
- Corynebacterium pyogenes*,
- isolation, characterization, abscesses, pigs carcasses 5619.
- isolation, milk, meat 3826.
- Corynebacterium renale*,
- bioassays, detection staphylococci 6224.
- Corynebacterium sepedonium*,
- ing rot, 4-potato virus S, potato virus X, infection, effects on, *Solanum tuberosum* yield 1230.
- Corynebacterium ulcerans*,
- ulceracin, purification, characterization, antibacterial activity 8026.
- Corynebacterium vaginale*,
- identification, vaginitis, man 888.
- Coryneforms*,
- α -hydroxy acid production 2743.
- odor compounds, degradation, manure, pigs 8060.
- Corynespora casicola*,
- leafspot, *Aeschynanthus pulcher* 2192.
- Corynespora cassicola*,
- infection, *Lycopersicon esculentum*, incidence, India 5009.
- Cow's milk,
- aflatoxin M1, cattle feeding regimes, *Gossypium hirsutum* seeds ammoniation, effects on 2945.
- drinking, association *Salmonella dublin* infection, genitrics, man 5616.
- isolation, *Campylobacter fetus* subsp. *jejuni* 4799.
- single-cell protein fatty acids, association cattle feeding trials 250.
- Staphylococcus aureus*, encapsulation, cross-reactivity 7577.
- Cosmetics*,
- enumeration methodology, gram-negative bacteria 2679.
- preservatives, antimicrobial activity 7965.
- Cosmos sulphureus*,
- seeds, storage conditions effects on fungal flora 4048.
- Cost-benefit analysis*,
- cephalosporins, antibacterial activity, side effects, reviews 7143.
- medical equipment, injectable vials, bacteria contamination 9822.
- wastewater treatment methodology 5320.
- Costa Rica,
- epidemiology, *Thanatephorus cucumeris* web blight, *Phaseolus vulgaris* 9325.
- Coteneaster,
- Ervnia amylovora* isolation, characterization 419.
- Cotoneaster pannosa,
- Ervnia amylovora* amylovorin host specificity 9371.
- Cotrimoxazole,
- antibacterial activity, conferences 6367.
- antibacterial activity, folic acid pathway 6033.
- antibacterial activity, nasopharynx isolates 7066.
- antibacterial activity, reviews 4288.
- antibacterial activity, reviews, bacteria 6032.
- antibacterial activity, *Salmonella* strains 8815.
- antibacterial activity, *Shigella*, clinical isolates 714.
- antibiotic sensitivity testing methodology comparison 6090.
- antimycobacterial activity 2420.
- bacteria antibiotic sensitivity testing 7984.
- bacteria urinary tract isolates, antibiotic sensitivity testing, antibiotic resistance 4287.
- Bordetella pertussis, drug sensitivity testing 7133.
- drug resistance, association, sulfonamide susceptibility, *Enterobacteriaceae* 8004.
- drug resistance, bacteria, reviews 3293.
- drug resistance mechanisms, bacteria 6000.
- drug resistance, *Salmonella* krefteld animal isolates, plasmids, role 3278.
- drug resistance, *Salmonella typhimurium* clinical isolates 4282.
- drug resistance, *Streptococcus pneumoniae* clinical isolates 3300.
- in vitro antibacterial activity, McCoy cells, *Chlamydia trachomatis* 6008.
- intravenous administration, bacteria infection, in vitro antibacterial activity, man 6037.
- Mycobacterium infection, in vitro antibacterial activity 6034.
- resistance, bacteria, septicemia, man 645.
- sensitivity, bacteria, urinary tract isolates 8813.
- Staphylococcus* clinical isolates, susceptibility 3281.
- tolerance, *Haemophilus influenzae*, association capsules polysaccharides 1562.
- Cotton,
- contamination, gram-negative bacteria, endotoxins 5659.
- contamination, gram-negative bacteria, endotoxins, effects on respiratory function, man 1320.
- localization, gram-negative bacteria, endotoxins 4913.
- post-harvest decay, *Aspergillus flavus*, aflatoxins, kojic acid biosynthesis 5648.
- pretreatment, ozone, sodium hydroxide, biodegradation, carbohydrate-degrading bacteria, rumen microorganisms 1062.
- wastes, glucose production, fungi cellulolytic enzymes 6653.
- Cottonseed,
- dust, endotoxins 5663.
- Coturnix japonica,
- ovomucoid, interaction trypsin-like enzyme, *Streptomyces erythraeus* 6481.
- Cotyledons,
- Gossypium barbadense*, susceptibility, *Alternaria macrospora*, infection, pathogenesis 9391.
- Gossypium hirsutum*, membrane potential, relationship, ATP, blight, *Xanthomonas campestris* pv. *malvacearum* 3055.
- Coulter counters,
- cell size measuring techniques, bacteria, yeasts, fungi 2646.
- Coumarins,
- antifungal activity, *Drechslera oryzae* 8635.
- Toxomiris brasiliensis*, fungi, effects on 7789.
- p-Coumaryl alcohol,
- biodegradation characterization, *Aspergillus flavus* 164.
- Coumerycin,
- bacteria cell injury 5280.
- Counter immunoelectrophoresis,
- Clostridium difficile* antigens 4477.
- detection antibodies, anti teichoic acid, *Staphylococcus aureus*, immunodiagnosis,

Counter Immunoelectrophoresis, (continued)

- infection 9927.
- detection Clostridium difficile toxins, feces 4912.
- detection Haemophilus influenzae cerebrospinal fluid, meningitis diagnosis 9941.
- diagnosis, meningitis, bacteria, man 6316.
- enterovirus, identification 1753.
- identification, bacteria clinical isolates, clinical microbiology 834.
- immunodiagnosis, Clostridium difficile cytotoxins, feces, colitis, man 9306.
- Staphylococcus enterotoxins identification 4918.

Counting methods

- Bacillus stearotherophilus, spores, dipicolinic acid activation 3612.
- bacteria, colony formation, statistical analysis 6342.
- bacteria, fluorescence+membrane filtration 1798.
- bacteria, fungi, food contamination, fluorescence, membrane filtration 176.
- bacteria, statistical analysis 1793.
- Bifidobacterium, dairy products, pharmaceuticals 175.
- Escherichia coli, Vibrio cholerae, microbial pollution, estuaries, marine environment 6258.
- fungi, beaches 9071.
- Geotrichum food contamination, canned products 4776.
- immunofluorescence, spores, Bacillus anthracis, Bacillus cereus 3573.
- microbial pollution, wastewater treatment 3466.
- microorganisms, food contamination 4541.
- molds food contamination, fruits products 4775.
- most probable number, bacteria, viability 5431.
- proteolytic bacteria, food contamination, fishery products 3808.
- yeasts, fluorescence, beer 2869.

Coupling factor 1,

- inactivation, histidine residues diethyl pyrocarbonate chemical modification, Rhodospirillum rubrum 8285.
- purification, 5'-p-fluorosulfonylbenzoyl adenosine chemical modification, mitochondria, Saccharomyces cerevisiae 943.
- β -subunit, N-ethoxycarbonyl-2-ethoxy-1,2-dihydroquinoline chemical modification, Escherichia coli 8268.

Cowpea aphid-borne mosaic virus,

- disease resistance, inheritance, Phaseolus vulgaris 4088.
- infection, Vigna unguiculata, disease resistance 3139.
- infection, Vigna unguiculata, disease resistance breeding 3138.

Cowpea banding mosaic virus,

- disease transmission, Vigna unguiculata, vectors, Aphididae 5673.
- infection, Vigna unguiculata, effects on, nodulation, nitrogen fixation 5691.
- infection, Vigna unguiculata, insecticides disease control vectors 5808.

Cowpea chlorotic mottle virus,

- elimination, temperature effects on, Vigna unguiculata 457.
- infection, Vigna unguiculata, transmission (seed), disease resistance 332.

Cowpea chlorotic spot virus,

- disease transmission, Vigna unguiculata, vectors, Aphididae 5673.

Cowpea mild mottle virus,

- infection, Glycine max, symptoms, Bemisia tabaci transmission 1129.
- isolation, Glycine max, characterization, Ivory Coast 2115.

Cowpea mosaic virus,

- enzyme-linked immunosorbent assay, antisera production, rabbits 6297.
- infection, Vigna sinensis, effects on, biomass, primary production, growth 7649.
- infection, Vigna unguiculata, disease resistance breeding 3138.
- infection, Vigna unguiculata, effects on yield 337.
- mixed infection, bean yellow mosaic virus, symptoms, pathology, Phaseolus vulgaris 2994.
- transmission (seed), screening association prevention, Vigna unguiculata 1124.
- Zea mays, pollen, inhibition, infection, Vigna unguiculata 327.

Cowpea mottle virus,

- transmission, Bemisia tabaci vectors, Arachis hypogaea, Glycine max 4946.

Cowpea necrosis virus,

- disease transmission, Vigna unguiculata, vectors, Aphididae 5673.

Cowpea severe mosaic virus,

- infection, Calopogonium mucunoides, Centrosema pubescens, Vigna radiata, Crotalaria juncea 4930.
- mixed infection, bean yellow mosaic virus, symptoms, pathology, Phaseolus vulgaris 2994.

Cowpox virus,

- DNA-binding protein, purification, characterization 7285.

Coxiella burnetii,

- infection, chickens, antibacterial activity, Allium sativum 668.

Coxsackievirus,

- interaction, clays, physicochemical properties 9811.

Coxsackievirus B3,

- recovery, methodology, oysters 2908.

Coxsackievirus B4,

- herbs, infusion, antiviral activity 7950.

Coxsackievirus B5,

- antiviral activity, 2-amino-5-(2'-N-methyl-sulfamidophenyl)-1,3,4-thiadiazole, derivatives 9693.

Coxsackievirus B5,

- radioimmunoassay, antigens cross-reactivity 8099.

Coxsackievirus B5,

- heat inactivation, methodology, food processing 1092.

Coxsackievirus B5,

- radioimmunoassay, antigens cross-reactivity 8099.

Crambus,

- resistance, Lolium perenne, association endophytes, fungi 4954.

Crassostrea gigas,

- food contamination, association, water pollution, phytoplankton, aquaculture 2924.

Crassostrea gigas,

- poliovirus bioaccumulation, polluted environments 1711.

Crassostrea virginica,

- contamination, Escherichia coli, relationship, Salmonella 2042.

Crassostrea virginica,

- poliovirus bioaccumulation, polluted environments 1711.

Crassulaceae,

- seafood, storage effects on bacteria 4765.

Crataegus,

- leaves, Colletotrichum gloeosporioides rot, detection methodology 9447.

Crataegus,

- Erwinia amylovora isolation, characterization 419.

Crataegus monogyna,

- fruits, Xylaria oxycanthae decay 1057.

Cratylia foribunda,

- growth stage, effects on nitrogen-fixing bacteria, symbiosis 3232.

Cream,

- pasteurization, contamination, psychrotrophic bacteria, gram-negative bacteria 8499.
- ripening, association, biosynthesis monocarbonyls, Streptococcus lactis,

Cream, (continued)

- Streptococcus cremoris 205.

m-Cresol,

- antifungal activity, wheat post-harvest decay 441.
- biodegradation, microorganisms, seasonal variations, water salinity effects on, aquatic environment 2876.

Crinipellis perniciosa,

- witches broom, Theobroma cacao, histopathology 398.

Cristulariella moricola,

- leafspot, pathology, Zizyphus mauritiana 8596.

Cronartium,

- blister rust, Pinus monticola, disease resistance, USA 8618.

Cronartium,

- blister rust, Pinus, Rodentia, feeding damage 2318.

Cronartium coleosporioides,

- blister rust, relationship habitat, Pinus contorta, surveys, USA, Idaho 5862.

Cronartium comandrae,

- blister rust, Pinus contorta subsp.latifolia, effects on production, cones, seeds 4169.

Cronartium comptoniae,

- rust, association, Phellinus pini, pathology, Pinus banksiana 548.

Cronartium,

- rust, pathology, Pinus banksiana 4155.

Cronartium flaccidum,

- association, Pinus nigra, Pinus sylvestris, leaves, basidiospores spore germination 4154.

Cronartium quercuum,

- infection, Pinus pinea, Pinus pinaster, host-pathogen interactions ultrastructure 5088.

Cronartium quercuum,

- fusiform rust, pinus, disease resistance 4148.

Cronartium quercuum f.sp.fusiforme,

- fusiform rust, disease resistance, genotype-environment interactions, Pinus taeda 6908.

Cronartium,

- rust, virulence, population genetics, disease resistance, Pinus 6913.

Cronartium,

- infection, colonization, Pinus taeda, ultrastructure 4166.

Cronartium,

- rust, aeciospores, inoculum, etiology, Quercus 2322.

Cronartium,

- rust, disease resistance, Pinus taeda 5805.

Cronartium,

- rust, Quercus seedlings, aeciospores inoculum 544.

Cronartium,

- rust, traidform, disease control, Pinus eliottii var.elliottii 9516.

Cronartium ribicola,

- blister rust, disease control, pruning, Pinus monticola 1457.

Cronartium,

- blister rust, disease control, pruning, Pinus strobus 1466.

Cronartium,

- blister rust, genetic variance, pathogenicity, Pinus monticola 1452.

Cronartium,

- canker, spatial distribution, environmental factors, Pinus monticola 4146.

Cronartium,

- hyphae, inoculation, Pinus lambertiana hypocotyls, pure culture 542.

Crop fields,

- Brassica campestris, fungal flora, seasonal variations, community composition 9546.

Crop fields,

- cellulolytic microorganisms, cellulose biodegradation, agricultural practices, fertilizers effects on 5982.

Crop fields,

- damage, pests, Aphididae, Triticum 3001.

Crop fields,

- foliar applications, pathogens, biological control, Arthropoda 991.

Crop fields,

- infection, USA, Arizona, Pythium aphanidermatum inoculum Beta vulgaris 426.

Crop fields,

- Plasmodiophora brassicae clubroot, calcium sulfate, sodium carbonate, calcium carbonate, effects on 314.

Crop fields,

- roots exudates, metabolism, rhizosphere microorganisms 5888.

Crop fields,

- soil microorganisms, enzymatic activity, biomass, agricultural practices effects on 5980.

Crop fields,

- soils (organic), soil microorganisms respiration, seasonal variations 3191.

Crop fields,

- Triticum, agricultural practices, denitrification, nitrification, mineralization 8680.

Crop fields,

- Vicia faba, Glomus mosseae spores 3186.

Crop plants,

- disease resistance, soil-borne diseases, genetic analysis 6850.

Crop plants,

- soil-borne diseases, disease resistance, phytopathogenic fungi, genetic analysis 6852.

Crop production,

- Beta vulgaris, bacteria pathogenicity effects on 403.

Crop production,

- Uromyces appendiculatus infestation effects on, Macroptilium atropurpureum, Australia 8589.

Crop production (no-tillage),

- tilage, association, soil nitrate reduction, USA, Maryland, USA, West Virginia 5950.

Crop production,

- Zea mays, association soil nitrogen balance 6986.

Crop residues,

- Brassica napus, chemicals treatment, Leptosphaeria maculans reproduction stages suppression 463.

Crop residues,

- burning, Cochliobolus sativus, vertical distribution, soil, Triticum aestivum 9358.

Crop residues,

- cellulose, pretreatment, heat+grinding, hydrolysis, cellulase, Trichoderma harzianum 6650.

- digestion (anaerobic), methanogenesis, inoculation, enumeration 7197.

- digestion, bacteria growth, factors affecting, forage quality 4860.

- ethanol production, cellulase activity, Trichoderma 4727.

- feeds, sheep, digestibility 4870.

- fermentation, bacteria, single-cell protein production 9110.

- fermentation, gases environments, Aspergillus oryzae, Trichoderma reesei, Streptomyces, reviews 4723.

- Gossypium hirsutum, digestibility, sheep, rumen microorganisms, pretreatment, ozone, sodium hydroxide 5833.

- Gossypium hirsutum, digestibility, sheep, rumen microorganisms, pretreatment, ozone, sodium hydroxide 5834.

- Gramineae, lactic acid production, Lactobacillus plantarum effects on 5623.

- Medicago littoralis, nitrogen sources, decomposition, soil microorganisms, uptake, Trichium aestivum 7001.

- organic matter decomposition, soil microorganisms 2325.

- Oryza sativa, acids hydrolysis, single-cell protein production, Candida tropicalis 9108.

- Oryza sativa, biodegradation, mesophilic microorganisms 168.

- roots, Fusarium culmorum infected, role, infection, Triticum aestivum, Hordeum vulgare, Lolium perenne 3961.

- Saccharum officinale, ethanol fermentation, Saccharomyces cerevisiae 2873.

- single-cell protein production, economics 9108.

- single-cell protein production, Fusarium, Sporotrichum 9112.

- single-cell protein production, nutritive value 9111.

- soil amendment, organic matter decomposition, soil microorganisms, C/N ratios 5986.

pp residues, (continued)

soil microorganisms decomposition, land disposal, reviews 5981.
 tomato mosaic virus persistence, infection, Lycopersicon esculentum 1233.
 Zea mays, cell walls, biodegradation, Chaetomium celliolyticum, protein biosynthesis 8418.
 Zea mays, pretreatment, heat + sodium hydroxide, hydrolysis, cellulase, Trichoderma viride 6448.
 Zea mays, survival, Cercospora zaeae-maydis, etiology 4051.
 Zea mays, survival, Colletotrichum graminicola 3946.

pp rotation,

association, catalase activity, soil, USA, anaerobic bacteria 2382.
 leaves, contamination, Lupinus diseases, fungi, viruses 4985.
 Beta vulgaris, insecticides, herbicides, effects on, fungi, soil 618.
 disease control, Rhynchosporium secalis, leaf blotch, Hordeum vulgare 5809.
 disease control, Septoria nodorum glume blotch, Triticum aestivum 9466.
 Gaumannomyces graminis var. tritici, take-all, Triticum aestivum 2266.
 Gramineae, effects on soil microorganisms 623.
 integrated control, herbicides, nematodes, soil fumigation, damping-off, Cucumis sativus 9473.
 Pigna unguiculata, Phaseolus vulgaris, Zea mays, nodulation, growth 1504.
 Zea mays + Sorghum, effects on maize chlorotic mottle virus incidence 2116.

pps,

tomovirus, pathogenicity, host range 2172.
 effects on Gaumannomyces graminis var. tritici survival, soil 3954.
 leaves, contamination, poliovirus, adenovirus, recovery methodology 1767.
 nitrogen fertilizer applications, uptake, soil microorganisms competition 599.
 plant breeding, germplasm, disease control, viruses 2242.
 plant diseases, disease spread, models 366.
 plant diseases, imported diseases 5666.
 plant diseases, tickle irrigation 5667.
 rhizobium, nitrogen-fixing bacteria, nitrogen fixation, genetic analysis 9604.
 rhizosphere, Azorhizobium, Azomonas agilis 9583.
 rhizosphere, nitrogen-fixing bacteria 9592.
 roots, plant diseases, fungi, bacteria 9411.
 soil microorganisms, fungal flora, specificity 3181.
 +weather, effects on soil microorganisms 5924.

ptalaris,

witches' broom, mycoplasma-like organisms, disease transmission, Orosius lotophagorum ryukyuensis 9424.

ptalaris juncea,

antiviral activity, Datura metel plant extracts, foliar application, sunnhemp rosette virus 7771.

tomato severe mosaic virus infection 4930.

usarum infection, symptoms, pathology 1280.

oaves, morphacin treatment, microorganisms ecology 7757.

seeds, Macrophomina phaseolina infection, pathogenesis 1272.

tomato mosaic virus, disease control, seed treatments, fungicides 1436.

ptalaris spectabilis,

mosaic disease, potexvirus 4981.

seed control, seedling blight, Alternaria cassiae 1286.

own gall,

Agrobacterium tumefaciens, biological control, Agrobacterium radiobacter,

Phaseolus vulgaris 2838.

Agrobacterium tumefaciens, cell adhesion, initiation, Helianthus 3060.

Agrobacterium tumefaciens induction, N2-(1,3-dicarboxypropyl)-L-leucine isolation

6390.

Agrobacterium tumefaciens, Nicotiana tabacum DNA organization 2202.

Agrobacterium tumefaciens, Nicotiana tabacum tumors morphology, genetic control

7689.

Agrobacterium tumefaciens, plant cells binding, host range 2977.

Agrobacterium tumefaciens, plants genetic engineering 3318.

Agrobacterium tumefaciens, temperature effects on, Helianthus annuus, Kalanchoe

8574.

bacteria, induction, plants 4928.

biological control, Agrobacterium tumefaciens agrocin, purification, host range

4716.

3-ryophyllum calycinum, Agrobacterium tumefaciens superoxide dismutase activity

5013.

Carya illinoensis, Agrobacterium, pathogens characterization, biological control,

use, Agrobacterium radiobacter, USA, Georgia 3971.

Chrysanthemum morifolium 1306.

Sesquium hirsutum roots, Agrobacterium radiobacter var. tumefaciens 1307.

Nicotiana tabacum, Agrobacterium tumefaciens Ti plasmid DNA analysis 7690.

Ti plasmid, Agrobacterium tumefaciens, genetic engineering 5788.

own rot,

Aspergillus niger, herbicides, disease control, Arachis hypogaea 2277.

ungi, Musa sapientum, pathogenicity 395.

Medicago sativa, Pseudomonas viridiflava 6744.

Medicago sativa, USA, Utah 9322.

Zizania glabra, Fusarium, pathogenicity, Medicago sativa, Egypt 5675.

hanatophora cucumers, virulence, Beta vulgaris 5008.

Rematophasia circinans, Medicago sativa, USA, South Dakota 8532.

own rust,

Puccinia coronata, disease resistance, plant breeding, Festuca arundinacea 448.

Puccinia coronata, Lolium, pathology 6768.

Puccinia coronata f.sp. avenae, Avena sativa, protein biosynthesis 3952.

Puccinia coronata f.sp. avenae, disease resistance, phytoalexins, Avena sativa

1353.

Puccinia coronata f.sp. lolii, disease resistance, Lolium perenne, Lolium

multiflorum 4079.

ycliferes,

lubroot, Plasmodiophora brassicae, calcium carbonate, effects on, pathogenesis

4255.

lubroot, role, 3-indolylmethylglucosinolate conversion 5761.

pathogenicity, clubroot, Agrobacterium brassicae 2211.

esicular-artuscular mycorrhizas 6969.

truses infection 3082.

ystices,

acidence, Vibrio haemolyticus, Kenya 1069.

ogogenics,

ffects on, bacteria, food processing 3862.

otolary,

inancement, Pseudomonas syringae, Lycopersicon esculentum, Glycine max 2224.

Zeae mays, Erwinia herbicola, biological control, bacteria, nuclei, activation

8643.

Cryoljny, (continued)

Zeae mays, Erwinia herbicola, inhibition, Pseudomonas syringae, ice nuclei activation, biological control 8642.

Cryporeervation,

fungi, nitrogen (liquid), methodology 6345.

media, semen contamination, antimicrobial activity, nipagin 1591.

Pasturella haemolytica, antigens localization, methodology comparison 849.

phytopathogenic fungi, viability, pathogenicity, methodology 4544.

Cryptonectria cubensis,

conidia, spore germination, mycelia growth, Eucalyptus phenols effects on, role,

disease resistance, cancer 5814.

Cryptonectria parasitica,

blight, virulence, effects on, dieback, Castanea dentata 8655.

Cryptococcus,

man, detection methodology, Cryptococcus neoformans 3632.

Cryptococcus,

antigens, latex agglutination, proteinase effects on interference factors 9992.

enzymes, electrophoresis 7422.

ethanol production 7527.

heteropolysaccharides biosynthesis 1952.

lysine production, use, DL- α -amino- ϵ -caprolactam 6395.

self fluorescence, use, detection, tissues 8156.

Cryptococcus albidus,

endo-1,4- β -D-xylanase, reaction products, characterization 1869.

Cryptococcus neoformans,

amphotericin B 5-fluorocytosine, ketoconazole, miconazole, interaction,

antifungal activity 1567.

antibiotic resistance, amphotericin B 3308.

antifungal activity, naphtho(1,2,3)-thiazoles derivatives 7092.

antifungal activity, vanillin, eugenol 2470.

cell culture, formalin antifungal activity 8793.

cell distribution, methodology 2724.

contamination, association, Columbia, feces, public health 4457.

cryptococcosis, man, detection methodology 3632.

diaryl sulfides, antifungal activity 2482.

Filobasidiella neoformans perfect state, media (culture) 4538.

growth, morphology, polyoxin D effects on 7170.

imidazoles, derivatives, antifungal activity 2480.

media (isolation), manure, Columbia 8154.

Cryptogams,

North America deserts soil characterization 5887.

Cryptosporidiosis,

canker, Acer rubrum, vector-borne diseases relationship Oecanthus angustipennis

9524.

Cryptospora corticale,

sooty bark, virulence, Acer pseudoplatanus 6931.

Crystal structure,

Escherichia coli aspartate carbamoyltransferase 23.

Crystal-optics,

Saccharomyces cerevisiae plasma membranes, association, resistance evaporation

use 4514.

Crystallinity,

cellulose flocs, Acetobacter acetii subsp. xylinum 8328.

oleandomycin phosphate, humidity effects on, 8862.

substrates, relationship, Trichoderma reesei cellulase activity association 8312.

Crystallization,

Escherichia coli, elongation factor G C-terminus 2738.

glycerol dehydrogenase purification, characterization, Cellulomonas 77.

Crytalography,

glutamin-(asparagin)-ase, Pseudomonas, Acinetobacter 7399.

Crystals,

Bacillus thuringiensis, biological control, Aedes aegypti larvae, potassium

carbonate effects on 4717.

calcium oxalate, detection, roots, mantles, Eucalyptus marginata, Pinus radiata,

association, ectomycorrhizas symbiosis 4211.

Clostridium tetani toxins, characterization 3890

oxytetracycline, solubility 1636.

+spores complex, Bacillus thuringiensis, exotoxins effects on Ostrinia nubilalis

7489.

CTP,

interaction aspartate carbamoyltransferase, Escherichia coli 1906.

CTP synthetase,

purification, kinetics, Escherichia coli 7384.

Cube,

Coffea, anthracnose, eye spot 2189.

Coffea, Colletotrichum gloeosporioides anthracnose, Cercospora coffeicola eye

spot 3910.

Cuculidae,

growth, mortality, fungi post-harvest decay stored products, sorghum 5799.

Cucumber fruit streak virus,

physicochemical properties, infection, Cucumis sativus 5789.

Cucumber green mottle mosaic virus,

replication, nitrates nutrition effects on, Cucumis sativus 2183.

seed-borne diseases, detection, enzyme-linked immunosorbent assay 7219.

Cucumber mosaic virus,

detection methodology, plant cells 4473.

infection, inclusions, morphogenesis, Cucumis annuum 8573.

infected Pachystachys coccinea, methodology, isolation, double-stranded RNA 3897.

infection, Capsicum annuum 7699.

infection, Cruciferae 3082.

infection, Cucumis sativus, effects on amino acids 3066.

infection, Cucurbita, immanine disease control 9483.

infection, cytology, Cucumis sativus 2164.

infection, disease resistance, Cucurbitaceae, plant breeding 3118.

infection, Lycopersicon esculentum, Jordan 6793.

infection, Lycopersicon esculentum, relationship, electrophoresis, acids

solubility proteins 2983.

infection, Myosotidium hortensia, new records 3035.

infection, Nicotiana tabacum, effects on, chlorophylls, starch, cells,

ultrastructure 3078.

infectivity, dark, inoculum preparation methodology effects on, Pisum sativum

7655.

isolation, Centaurea cyanus 2154.

isolation, identification, Capsicum annuum, Cucumis melo 3036.

isolation, Psophocarpus tetragonolobus, characterization, USA, Florida 1125.

pathogenicity, disease resistance, Lactuca saligna, genetic analysis 3135.

Subject Index

Cucumber mosaic virus, (continued)

physicochemical properties, disease transmission, Aphididae, Phaseolus vulgaris 7654.
 ringspot, *Agave reptans* 3043.
 RNA deflection, *Nicotiana glauca* extracts 5783.
 satellite RNA, role, *Lycopersicon esculentum*, white leaf disease 1292.
 = *Sphaerotheca fuliginea*, infection, effects on, micronutrients, *Cucumis melo* 3076.
 susceptibility, cultivars, *Nicotiana tabacum* 2168.
 susceptibility, *Gladiolus* 2171.
 white leaf disease, RNA, relationship, infectivity, *Lycopersicon esculentum* 2195
Cucumeropsis edulis,
 mosaic disease, viruses etiology, isolation, characterization, *Nigella* 4025.
Cucurbita,
 fruit rot, *Ulocladium chartarum*, extracellular enzymes effects on pathogenesis 4015.
Mycosphaerella melonis infection susceptibility 7709.
 stem blight, epidemiology, relationship, powdery mildew, pest attack 1248.
 wilt, *Phytophthora drechsleri* 2210.
Cucurbita melo,
 collapse, *Monosporascus* eutypoides role, Israel 9380.
 Colletotrichum lagenarium infection effects on lignin biosynthesis 3097.
 Colletotrichum lagenarium infection, ethylene effects on glycoproteins accumulation, cell walls 3981.
 cucumber mosaic virus infection, identification 3036.
 cucumber mosaic virus = *Sphaerotheca fuliginea*, infection, effects on, micronutrients 3076.
 disease resistance, *Pseudoperonospora cubensis* inoculation 7752.
 downy mildew disease resistance 1358.
 leaf blight, disease control, factors affecting pesticide applications 3150.
 Macrophomina phaseolina infection, role, transmission (seed) 3979.
 Monosporascus eutypoides infection, soil moisture, temperature, effects on, growth 5758.
 post-harvest decay, fungicides effects on 7723.
Sphaerotheca fuliginea pathogenicity 1275.
 squash mosaic virus infection, Africa 1237.
 wilt, *Fusarium oxysporum*, symptoms 2214.
Cucurbita melo var. mamordica,
 canker, *Synchytrium*, pathogenesis 6782.
 canker, *Synchytrium trichosanthidis*, anatomy analysis 3976.
Cucurbita metuliferus,
 papaya ringspot virus disease resistance, relationship watermelon mosaic virus disease resistance, genetic analysis 5778.
Cucurbita sativa,
 chlototoxicity, microorganisms metabolites, soil pollutants 4193.
Cucurbita sativus,
 beet yellows virus infection, disease transmission, *Trialeurodes vaporariorum* 9431.
 Colletotrichum lagenarium, induction, disease resistance. *Pseudomonas lachrymans* 3124.
 Colletotrichum lagenarium infection, disease resistance induction 444.
 cucumber fruit streak virus infection 5789.
 cucumber mosaic virus infection, cytology 2164.
 cucumber mosaic virus infection, effects on amino acids 3066.
 cytology, hop stunt virus infection 3039.
 damping-off, integrated control, herbicides, nematocides, crop rotation, soil fumigation 9473.
 disease resistance, downy mildew, *Pseudoperonospora cubensis* 8609.
 disease resistance, *Fusarium oxysporum* f.sp. *cucumerinum*, pathogens induction 2262.
 disease resistance, powdery mildew, cultural conditions 2250.
Fusarium oxysporum f.sp. *cucumerinum* wilt, disease resistance induction 465.
Fusarium oxysporum f.sp. *cucumerinum* wilt, incidence 9415.
 grey mold, *Botrytis cinerea*, dicarboximides resistance, greenhouses 6884.
 hop stunt disease virus infection, localization, leaves cells 313.
 leafspot, *Xanthomonas campestris* pv. *cucurbitae* 1305.
 leaves, carbohydrates metabolism, *Sphaerotheca fuliginea* infection, effects on 1273.
 leaves protein composition, disease resistance, tobacco necrosis virus infection 9460.
 necrosis, *Pseudomonas syringae* pv. *tomato*, etiology 3065.
 nitrates nutrition effects on cucumber green mottle mosaic virus replication 2183.
 pathogenicity, *Pseudomonas syringae* pv. *lachrymans*, association, survival, soil, plant debris 9574.
 pathology, powdery mildew, *Leveillula taurica* 5776.
 powdery mildew, fungicides resistance, measuring techniques 7888.
 powdery mildew, *Sphaerotheca fuliginea*, biological control, *Ampelomyces quisqualis*, hyperparasitism 2275.
 powdery mildew, *Sphaerotheca fuliginea*, susceptibility, pathogenesis 3047.
 proteins, hypersensitive response, tobacco necrosis virus 3113.
 = *Pseudomonas lachrymans* disease resistance inheritance 6851.
Pseudomonas syringae pv. *lachrymans* leafspot, disease control, seed treatments 9501.
 Pythium root, biological control, *Enterobacter cloacae* seed treatments 9481.
 rhizosphere, roots, disease spread, *Pseudomonas syringae* pv. *lachrymans* 4997.
 roots, plant diseases, fungi, bacteria 9411.
 sour cherry necrotic ring spot virus infection 2144.
 spot, *Leandria momordica*, pathology 5768.
 tobacco necrosis virus infection, osmotic stress effects on enzymes 413.
Trialeurodes vaporariorum, pest control, biological control, *Venturia lecanii* 126.
Cucurbita,
 cucumber mosaic virus infection, imanine disease control 9483.
Mycosphaerella melonis infection susceptibility 7709.
 watermelon mosaic virus infection, characterization 4984.
 wilt, *Phytophthora drechsleri* 2210.
Cucurbita maxima,
 pumpkin mosaic virus, effects on, primary production 2196.
 pumpkin mosaic virus infection, transmission (horizontal), *Aphis craccivora* vectors 1231.
 sour cherry necrotic ring spot virus infection 2144.
 watermelon mosaic virus infection, effects on enzymes activity 9434.
Cucurbita pepo,
 susceptibility, *Fusarium oxysporum* f.sp. *niveum* infection 4010.
 viruses infection, field trials 5018.

Cucurbita pepo, (continued)

watermelon mosaic virus infection, incidence, prophylaxis, economic importance, Jordan 1317.
Cucurbitaceae,
 plant breeding, disease resistance, cucumber mosaic virus infection 3118.
Culex fatigans,
 larvae, toxicity, histopathology, *Bacillus sphaericus* 8363.
Culex molestus,
 biological control, *Bacillus thuringiensis* 4712.
Culex pipiens,
 biological control, *Bacillus thuringiensis* 1008.
 biological control, *Bacillus thuringiensis* 4712.
 biological control, *Metarrhizium anisopliae*, conidia, viability, characterization 7479.
 larvae, biological control, *Bacillus sphaericus* 6611.
Metarrhizium anisopliae, conidia, viability, temperature, relative humidity, effects on, virulence 7478.
 pest control, pathogenicity, environmental effects, *Bacillus thuringiensis* 295.
 virulence, storage conditions, effects on, *Metarrhizium anisopliae*, conidia, viability 7480.
Culex pipiens molestus,
 biological control, *Bacillus thuringiensis* var. *israelensis*, pathogens, temperature effects on 2075.
Culex quinquefasciatus,
 biological control, *Bacillus thuringiensis*, *Bacillus sphaericus*, *Metarrhizium anisopliae* 2836.
 biological control, larvicides, factors affecting, *Bacillus thuringiensis* 8380.
 pest control, *Bacillus sphaericus* spores, spore crystals, toxicity 1035.
Culex tritaenialis,
 biological control, *Bacillus thuringiensis*, paddy fields, *Oryza sativa* 6599.
 biological control, *Lagenidium giganteum*, survival, overwintering, paddy fields 5615.
Culicidae,
 biological control 8380.
 biological control, *Bacillus sphaericus* mortality 2850.
 biological control, *Bacillus sphaericus*, persistence, aquatic environment 1024.
 biological control, *Bacillus thuringiensis*, δ -endotoxin 1018.
 biological control, *Bacillus thuringiensis*, field trials 1030.
 biological control, *Bacillus thuringiensis* subsp. *israelensis* δ -endotoxin 5553.
 biological control, *Culicoides clavosporus*, strains comparison 6591.
 biological control, *Deuteromyces*, pathogenicity, life cycle 1012.
 biological control, larvicides, *Bacillus thuringiensis* 6600.
 biological control, pathogens, fungi 1017.
 biological control, use *Deuteromyces*, spores culture 1807.
 histopathology, midgut, toxins, *Bacillus sphaericus* 1022.
 larvae, biological control, association *Bacillus thuringiensis* subsp. *israelensis* plasmids 2842.
 larvae, biological control, use *Bacillus thuringiensis* δ -endotoxin, toxicity, stability 294.
 larvae lethality, association, *Bacillus thuringiensis* var. *israelensis* toxins biosynthesis, factors affecting 306.
 larvicides, pesticide applications, methodology, equipment, *Bacillus thuringiensis* 9204.
 pathogenicity, pest control, *Bacillus thuringiensis* 296.
 pest control 6599.
 pest control, biological control, *Lagenidium giganteum* 1014.
 pest control, biological control, toxicity, *Bacillus thuringiensis* 297.
Culicoides,
 larvae, biological control, pathogens, fungi 1013.
Culicoides clavosporus,
 biological control, *Aedes taeniorhynchus* 2834.
 biological control, *Culicoides*, strains comparison 6591.
 biological control, pathogenicity, mortality, *Simulium vittatum* 9209.
 pathogens, biological control, bioassays, *Simulium pectipies*, *Simulium vittatum* 7483.
Cultivation,
 Basidiomycetes, food industry 2047.
 Basidiomycetes, fungi infection 2208.
 Basidiomycetes, pest control 2046.
Claviceps purpurea isolation, *Arthraxon lanifolius*, association, strains adaption 116.
 methodology, Basidiomycetes 2719.
 mushrooms, cultivation techniques, reviews 5614.
 mushrooms, technology, species use, USA, reviews 4825.
 trees, mycorrhizas role, reviews 7780.
 Triticum, association, aging microorganisms, metabolism interaction 3943.
 vegetables, fungi, infection, disease control 2209.
Cultivation techniques,
 Beta vulgaris, root rot, *Rhizoctonia solani* 1279.
 tomato yellow leaf curl virus, disease spread, *Lycopersicon esculentum* 1236.
Cultural characteristics,
 effects on toxins biosynthesis, *Salmonella* 8519.
 Klebsiella pneumoniae, 2,3-butanediol biosynthesis 8370.
Prunella arvensis, blast, relationship pathogenicity, *Oryza sativa* 5699.
Culture,
 bacteria, freeze-drying, association, contamination analysis methodology 2684.
 concentration *Rhodospseudomonas capsulata*, relationship, *Rhodospseudomonas palustris* nitrogenase biosynthesis 3687.
 Deuteromycetes, spores production, biological control, *Culicidae* 1807.
 Entomophthorales, use biological control, Insecta 1805.
 gram-negative bacteria salad, *Prunus salicina* 1153.
 Hyphomycetes, use biological control, Insecta 1806.
 methodology, *Calvatia gigantea* α -amylase production 2772.
 methodology, pathogens, Entomophthorales, Insecta 1783.
 methodology, *Salmonella* isolation, animals food contamination 1088.
 methodology, *Staphylococcus aureus* enterotoxin B biosynthesis, purification 2963.
 methodology, *Streptococcus group A*, anaerobic conditions, infection diagnosis, man 2696.
 methylotrophic bacteria, methodology, Japan 4502.
 Mycobacterium leprae, in vitro 1778.
 pathogens, bottles, methodology 5358.
 Photobacterium leiognathi, luminescence use control 891.

ture, (continued)

phototrophic bacteria, fermenters 3555.
Fusarium oeschariae + *Erwinia carotovora*, effects on, nutritive value, Triticum aestivum, straw, Ruminaria 254.
 pioplasmata citri, isolation, plants, *Circulifer tenellus*, *Scaphytopius nitridus* 1769.
 wabs, methodology, *Mycobacterium tuberculosis* 869.
 yine, bacteria, methodology 5387.
 yasts, effects on alcoholic beverages food quality 1050.
 yure collections,
 omputer applications, data processing, computer programs 5391.
 yingi, storage, nitrogen (liquid) 4540.
 yicroorganisms, storage, preservation 5363.
 yitrogen (liquid) storage, *Diplocarpon rosae* conidia 3629.
 yroge *Erwinia carotovora*, culture collections, pathogenicity 2239.
 yruses, Mycoplasma contamination, fluorescent probes detection 6293.
 yure systems,
 effects on *Aeromonas hydrophila* proteinase production 2805.
 effects on *Trichoderma viride* cellulolytic enzymes biosynthesis 1925.
 ram-negative bacteria, L-methionine γ -lyase production 5389.
 lastics, microwave radiation sterilization, bacteria 708.
 yure tanks,
 aerobic, aerobic conditions, companion, anaerobic conditions 9883.
 ylinium cynulium,
 ntit, etiology, *Fusarium equiseti* 1300.
 ymminalia,
 ust, Berbens, Mahonia, taxonomy 423.
 ymminalia *santa* sp. nov.,
 ust, Berbens, Mahonia, taxonomy 423.
 ymminghamella bertholletiae,
 rug sensitivity testing, clinical isolates 692.
 ymminghamella blakesleeana,
 ickel toxicity 1565.
 ymminghamella echinulata,
 oil, herbicides effects on 8707.
 ymminghamella elegans,
 romatic compounds oxidation, association, glucuronide, sulfate biosynthesis 2391.
 onversion, 17 α -aza-D-homoandroster-5-ene, 17 α -D-homoandroster-5-ene, derivatives 6640.
 ycarbons, aromatic compounds, biodegradation 3263.
 ychthalene biodegradation, stereospecificity 7019.
 yretreatment spores, stimulation 11-desoxy-17-hydroxycorticosterone hydroxylation 3704.
 yressus,
 yphythophthora cinnamomi experimental infection, disease resistance 472.
 yressus luitanica,
 onochaeta unicornis canker, incidence, Kenya 4151.
 yressus sempervirens var. horizontalis,
 anker, *Seiridium cardinale*, pathology 5869.
 yressus sempervirens var. stricta,
 anker, *Seiridium cardinale*, pathology 5869.
 yrous oxide,
 ntifungal activity, in vitro, *Phytophthora palmivora* 5824.
 yron,
 oil amendment, effects on soil microorganisms, fungi 2379.
 ycurbita,
 useptibility, *Fusarium oxysporum* f.sp. niveum, infection 4010.
 ycurbita pepo,
 empiasm, disease resistance, vegetable marrow mosaic virus 3116.
 yred products,
 heat, potassium sorbate inhibition *Clostridium botulinum* growth 3857.
 yring, control, *Clostridium botulinum*, reviews 4821.
 yring,
 heddar cheese, survival, *Campylobacter fetus* subsp. fetus 2032.
 am, freeze-thawing effects on food contamination, bacteria levels 182.
 am, smoking, contamination, growth, yeasts, fungi, bacteria 180.
 ystactium,
 -2 toxin, biosynthesis, metabolism, pathway 8520.
 yvalaria,
 ntifungal activity, [1-(carbethoxyamido)-O-alkylisoureia]copper(II) derivatives 5205.
 ychemicals, antifungal activity 3336.
 yore germination, iprodione, thiophanate methyl, effects on 7765.
 ymergence, water pollution effects on 8977.
 yxity, association, black tip, rice 3963.
 yvalaria andropogonis,
 alfspot, *Cymbopogon martini* 3985.
 yvalaria eragrostidis,
 aves lesions, *Stylosanthes guianensis* 3991.
 yvalaria lunata,
 le acids conversion 3798.
 yfects on seeds germination, *Phaseolus mungo* 3924.
 ymobilized cells, cortexolone hydroxylation, hydrocortisone biosynthesis 3726.
 yctin biodegradation 3776.
 yegenolone triacetate conversion hydrocortisone-17 α -acetate 5529.
 yeds, fungicides effects on, *Capsicum annum* 5832.
 yvalaria lunata var. *aerial*,
 ug sensitivity testing 7939.
 yzate,
 ease control, *Peronospora parasitica*, downy mildew, *Brassica pekinensis* 8631.
 ycuta,
 le, greening disease transmission, *Citrus sinensis*, *Vinca rosea* 9448.
 yeds germination inhibition, bacteria activity 8577.
 ycuta campestris,
 arasitism, disease transmission, grapevine fleck virus, grapevine yellow vein virus, grapevine leaf roll virus, *Vitis vinifera* 6794.
 ycuta reflexa,
 racts, antiviral activity 6072.
 yin,
 odegradation, soil microorganisms 5931.
 ynase,
 ctivity, *Colletotrichum gloeosporioides*, anthracnose, *Carica papaya*, pesticides (organophosphorus), effects on 8563.

Cutinase, (continued)

fungi 8241.
Fusarium solani f.sp. *plisi*, inhibition, benomyl 1414.
Fusarium solani f.sp. *plisi*, penetration, pesticides (organophosphorus) inhibition, *Pisum sativum* 2279.
 inhibition, *Fusarium solani* infection, *Pisum sativum* protection, association, organophosphorus 500.
 Cutting,
 Catharanthus roseus, rooting, mycoplasma-like organisms infection 1310.
 Cyamopsis tetragonoloba,
Fusarium solani root rot 5676.
 Cyanide,
 biosynthesis, *Pseudomonas fluorescens*, *Pseudomonas aeruginosa*, aquatic environment, in vitro 6606.
 detoxification, cyanide hydratase, immobilized cells, fungi 9982.
 metabolism, β -cyanoalanine biosynthesis, radioactive labelling, *Chromobacterium violaceum* 2748.
 production, cell-free system, *Chromobacterium violaceum* 1043.
 Urate oxidase inhibition, mechanisms, *Candida utilis* 945.
 Cyanide hydratase,
 cyanide detoxification, immobilized cells, fungi 9982.
 β -Cyanoalanine,
 biosynthesis, cyanide metabolism, radioactive labelling, *Chromobacterium violaceum* 2748.
 Cyanocobalamin,
 biosynthesis, *Propionibacterium*, 5,6-dimethylbenzimidazole effects on 8388.
 production, *Propionibacterium shermanii*, use, limes processing industrial wastes 8391.
 production, *Propionibacterium freudenreichii* subsp. *shermanii*, soybean milk whey carbon sources 5565.
 serum levels, man, *Lactobacillus leichmannii* use, bioassays 885.
 Cyanogenesis,
 fungi, assays, *Pseudomonas* contamination, hydrogen cyanide 3556.
 Cyanophyta,
 association, deep water *Oryza sativa*, nitrogen fixation, Philippines 2358.
 membranes lipids, relationship soil sediments 5104.
 nitrogen fixation, *Oryza sativa*, USSR 7846.
 phages, aerosols, wastewater treatment, indicator species 9796.
 Cyanuric acid,
 biodegradation, anaerobic bacteria 2900.
 Cyathus striatus,
 adamine oxygenation derivatives 7463.
 Cytasin,
 activation, association, intestinal microflora mutagens, rats, genetic analysis 4510.
 Cyclamen graecum,
 disease control, grey mold, *Botrytis cinerea*, iprodione, procymidone, vinclozolin 1424.
 Cyclic AMP,
 binding, kinetics, protein kinase, *Mucor rouxii* 6469.
 effects on enzymes, *Klebsiella pneumoniae* 1938.
 growth, relationship, tylosin, biosynthesis, *Streptomyces fradiae*, mutants 4398.
 ighs, cellulase production, catabolite repression, *Thermoplasma curvata* 9179.
 +poly(l)-poly(C)+cyclic GMP, activation, defense mechanisms, *Nicotiana glauca* glycoproteins, viruses infection 3136.
 Staphylococcus simulans, effects on extracellular-enzymes biosynthesis 2792.
 stimulation protein kinase phosphorylation fructose-bisphosphatase, yeasts 8283.
 Cyclic GMP,
 +cyclic AMP+poly(l)-poly(C), activation, defense mechanisms, *Nicotiana glauca* glycoproteins, viruses infection 3136.
 Cyclic peptides,
 Helminthosporium carbonum toxins, conformation, N.M.R. 7618.
 3'-5'-Cyclic-nucleotide phosphodiesterase,
 turimycin, fermentation, regulation 8037.
 3'-5'-Cyclic-nucleotide phosphodiesterase,
 inhibitors, *Bacillus subtilis*, physicochemical properties 7176.
 isoenzymes, purification, characterization, *Dictyostelium discoideum* 6452.
 purification, characterization, *Yersinia pestis* 971.
 3'-5'-Cyclic-nucleotide phosphodiesterase inhibitor,
Bacillus subtilis, activity mechanisms 7305.
Bacillus subtilis, isolation, amino acid sequence, lactones linkage localization 7304.
Bacillus subtilis, isolation, fatty acid composition 7303.
 Cydindrodium crotalariae,
 infection, *Arachis hypogaea*, germplasm disease resistance 474.
 Cyclohexanone,
 biodegradation, *Nocardia* 2014.
 3-Cyclohexencarboxylic acid,
 Alcaigenes faecalis, biodegradation 1053.
 Cyclohexenones,
 reduction, *Beauveria sulfurescens* 130.
 Cycloheximide,
 antifungal activity, in vitro, *Phytophthora palmivora* 5824.
 assays, fermentation monitoring 9827.
 effects on ethylene production, soil microorganisms 5907.
 use, cell culture, *Mycobacterium leprae* murium 9034.
 Cyclopelvic acid,
 antimicrobial activity, *Aspergillus duricaulis* 8877.
 Cyclopentenones,
 reduction, *Beauveria sulfurescens* 130.
 Cyclopentyl rifamycin,
 antimycobacterial activity, *Mycobacterium* 2419.
 Cyclophosphan,
 cytotoxicity, *Escherichia coli* morphology 2444.
 Cyclophazonic acid,
 biosynthesis, *Aspergillus flavus*, association chickens feeds contamination 8512.
 Cyclopolic acid,
 derivatives, antimicrobial activity, *Aspergillus duricaulis* 8877.
 Cycloprodigiosin,
 Benckea gazogenes, structure 8377.
 Cyclopropane fatty-acid synthetase,
 purification, characterization, *Escherichia coli* 8218.
 Cycloserine,
 bactericidal activity, autolysins deficient mutant, *Bacillus subtilis* 4331.

Subject Index

- Cycloserine, (continued)**
effects on *Staphylococcus aureus* cell walls phospholipids content 3380.
- Cyclosporin A**,
Tolypocladium infatum, biosynthesis, pathways 8343.
- Cyclosporins**,
biosynthesis, characterization, Tolypocladium infatum 132.
biosynthesis, Trichoderma 7992.
- Cydia**,
biological control, baculovirus 998.
- Cydia pomonella**,
baculovirus, biological control 997.
biological control, persistence, baculovirus 1005.
fruit trees, biological control, granulosis virus 8353.
granulosis virus biological control 8356.
granulosis virus biological control, association, nuclear polyhedrosis virus biological control Adoxophyes orana 8354.
granulosis virus biological control, field trials 8357.
- Cylinrocarpon**,
invasion, Trifolium repens 5692.
- Cylinrocarpon destructans**,
biosynthesis, auxins, gibberellins like compounds, pathogenicity, Abies alba 4174.
cytokinins, role pathogenicity, Abies alba 5881.
infection, Pseudotsuga menziesii roots, incidence 4162.
- Cylinrocarpon didymum**,
dieback+canker, Rhizophora, Gambia 1454.
- Cylinrocarpon gracile**,
infection, Medicago sativa, relationship sulfur deficiency 7658.
- Cylinrocarpon heteronema**,
bark necrosis, Platanus 6920.
- Cylinrocladium**,
isolation, trees roots, stems, media (selective) 6352.
- Cylinrocladium crotilariae**,
black rot, soil inoculum, spatial distribution, epidemiology, Arachis hypogaea 1123.
root rot, pathology, Glycine max, Meloidogyne incognita, growth regulators, effects on 3909.
- Cylinrocladium haptoseptatum**,
post-harvest decay, pathogenicity, symptoms, Rumohra adiantiformis 1326.
- Cylinrocladium macrosporum**,
needle blight, pinus, pathogenesis, disease control 7782.
- Cylinrocladium peridia**,
post-harvest decay, pathogenicity, symptoms, Rumohra adiantiformis 1326.
- Cylinrocladium scoparium**,
diseases, forests trees, Malaysia 2316.
- Cylinrocladium**,
plant diseases, Eucalyptus, pathology 4178.
- Cylinrocladus adspersus**,
role, charcoal rot disease transmission, Helianthus annuus 9444.
- Cymbidium**,
mycorrhizas symbiosis, greenhouses 9562.
- Cymbidium ringspot virus**,
cytopathology, Gomphrena globosa 4018.
cytopathology, Nicotiana benthamiana, Nicotiana clevelandii, Gomphrena globosa 4035.
infection, Nicotiana clevelandii, effects on, peroxisomes, vesicles, formation
- Cymbopogon martinii**,
leafspot, fungi 3985.
- Cymbopogon martinii var. motia**,
plant extracts, antifungal activity, Helminthosporium oryzae 691.
- Cynara scolymus**,
inulin hydrolysis, Kluyveromyces fragilis inulinase characterization 71.
- Cynodon dactylon**,
pathogenicity, Rhizoctonia zeae 5701.
phytooxins, allelopathy, Polygonum aviculare 8683.
raatoon stunt, mycoplasma-like organisms, bacteria, etiology 3009.
white leaf disease, mycoplasma-like organisms, tiarulin treatment 510.
- Cypermethrin**,
disease control, Rhizoctonia solani, Glycine max 8625.
- Cyperus rotundus**,
Azotobacter chroococcum seed treatments, nitrogen fixation, effects on yield 8677.
symbiosis, Azotobacter chroococcum 5948.
- Cyphomandra belaeae**,
infection, potato aucuba mosaic virus, isolation, physicochemical properties 393.
wilt disease resistance 1384.
- L-Cysteic acid**,
detection, cell surface, Staphylococcus aureus 1834.
- Cysteine**,
antibacterial activity, Streptococcus 3319.
biodegradation, anaerobic bacteria 2900.
- D-Cysteine**,
biosynthesis, use 3-chloro-D-alanine chloride-lyase, Pseudomonas putida 4557.
enzymatic synthesis, 3-chloro-D-alanine metabolism, Pseudomonas putida 4581.
Pseudomonas putida, biosynthesis 8204.
- Cysteine desulphhydrase**,
sand, activity, correlation, vegetation, British Isles 6955.
- Cysteine dioxygenase**,
purification, characterization, Histoplasma capsulatum 2811.
- Cystic fibrosis**,
man, Pseudomonas aeruginosa isolation, acetamide 9904.
- Cystospora**,
infection, trees, wind barriers, distribution 4175.
- Cystospora pinii-canadensis**,
USA mines forest products biodegradation 7792.
- Cytidine 5'-diphosphate choline**,
fermentation, ATP, regeneration, Hansenula jadinii 1960.
- Cytidine deaminase**,
pyrimidine nucleoside phosphorus analogs inhibition, Escherichia coli 69.
- Cytochalasin E**,
Aspergillus clavatus, isolation, characterization 6702.
- Cytochalasin K**,
Aspergillus clavatus, isolation, characterization 6702.
- Cytochalasin M**,
Chalara microspora, structure, X-ray crystallography 1959.
- Cytochalasins**,
Arthrobaacter sialophilus, effects on glucose uptake 1553.
- Cytochrome c**,
subunit association, N.M.R., ultracentrifugation, light scattering, Rhodospirillum rubrum 7296.
- Cytochrome b**,
characterization, Escherichia coli 3658.
cytochrome c1 complex, ferricyanide reduction, Saccharomyces cerevisiae 7291.
isolation, characterization, ubiquinol-cytochrome c reductase, Rhodopseudomonas sphaeroides 4564.
physicochemical properties, ubiquinol-cytochrome c reductase, Rhodopseudomonas sphaeroides 4692.
- Cytochrome c**,
binding sites, reaction centers, cross-linking dithiobispropionimide, dimethyl-suberimide, Rhodopseudomonas sphaeroides 3651.
characterization, Escherichia coli 3658.
folding kinetics, structure intermediates, absorption spectroscopy, fluorescence, Saccharomyces cerevisiae 4559.
heme iron coordination geometry, N.M.R., Saccharomyces cerevisiae, Candida krusei 3643.
iodoacetamide chemical modification, folding kinetics, fluorescence, structure-activity multiple forms, purification, characterization, Nitrosomonas europaea 5479.
purification, characterization, cell membranes, Rhodopseudomonas capsulata 4633.
Ustilago violacea, purification, amino acid composition 2736.
- Cytochrome c oxidase**,
Nitrosomonas europaea, purification, characterization 6524.
purification, characterization, membranes, Rhodopseudomonas capsulata 6504.
- Cytochrome c-551**,
purification, characterization, cell membranes, Pseudomonas aeruginosa 1828.
- Cytochrome c-555**,
purification, characterization, cell membranes, Pseudomonas aeruginosa 1828.
- Cytochrome c1**,
cytochrome b complex, ferricyanide reduction, Saccharomyces cerevisiae 7291.
- Cytochrome c2**,
purification, thiyl radicals, Rhodopseudomonas viridis 6392.
- Cytochrome c3**,
purification, tertiary structure, electrochemistry, polarography, Desulfovibrio 8192.
- Cytochrome C3 hydrogenase**,
activity, Desulfovibrio desulfuricans, immobilized cells, beads 4666.
- Cytochrome c551**,
isolation, purification, characterization, Chromatium vinosum 4555.
multiple forms, heme iron coordination geometry, N.M.R., Rhodopseudomonas gelatinosa 3653.
purification, carbon monoxide binding kinetics, Pseudomonas aeruginosa 4556.
redox properties, optical properties, Desulfovibrio desulfuricans 6546.
- Cytochrome c553**,
redox properties, optical properties, Desulfovibrio desulfuricans 6546.
- Cytochrome oxidase**,
Pseudomonas aeruginosa, N.M.R., magnetic susceptibility 2777.
purification, Pseudomonas aeruginosa 4614.
- Cytochrome P-450**,
amino acid sequence, secondary structure, Pseudomonas putida 6491.
purification, characterization, microsomes, Candida tropicalis 2750.
purification, microsomes, Rhizopus nigricans 6468.
Saccharomyces cerevisiae, inhibition, buthobate role 9488.
- Cytochrome peroxidase**,
assays, Saccharomyces peroxidase 5517.
heme, redox properties, E.S.R., Pseudomonas aeruginosa 3696.
- Cytochrome P448**,
Saccharomyces cerevisiae, immobilization 1927.
- Cytochrome P450**,
Saccharomyces cerevisiae, continuous culture 1930.
- Cytofluorimetry**,
Allium, Botrytis allii, infection 3975.
- Cytokinins**,
Cercospora rosicola, inhibition abscisic acid biosynthesis 5531.
Cylinrocarpon destructans, role pathogenicity, Abies alba 5881.
levels, grain, Triticum aestivum, Hordeum vulgare, relationship, disease resistance, mildew, Erysiphe graminis 2249.
levels, Rhizobium leguminosarum, nodules, Pisum sativum 5120.
mushrooms, food spoilage, γ radiation, storage effects on 3816.
- Cytology**,
mabdivirus infection, Lactuca sativa 1234.
viruses infection, crops 2164.
wheat mosaic virus infection, Triticum aestivum, Panicum miliaceum 2117.
- Cytolysis**,
Escherichia coli, antibacterial activity, mecillinam-nocardin A 2555.
yeasts, soil microorganisms 581.
- Cytomegalovirus**,
antiviral activity, nucleosides analogs 9687.
antiviral activity, 9-(2-hydroxyethoxymethyl)guanine, interferon 8796.
breast milk, storage effects on 1073.
DNA biosynthesis, antiviral agents activity, measurement, nucleic acids hybridization analysis 8796.
immunoglobulin G detection, immunoassays 5375.
infected, embryo fibroblasts, novobiocin, inhibition, replication 2489.
infection, immunoglobulin A serum levels, immunoperoxidase test, man 6296.
isolation, methodology, cell culture 9844.
- Cytomegalovirus (human)**,
antiviral agents, trifluorothymidine 3347.
DNA biosynthesis, protein biosynthesis, antiviral activity, 9-(1,3-dihydroxy-2-propoxymethyl)guanine, cell culture 9689.
- Cytomegalovirus (murine)**,
antiviral activity, phenylheptatriene 7097.
- Cytopathology**,
cherry leaf roll virus, association, Phaseolus vulgaris black line 339.
viruses leafroll, Vitis vinifera 429.
- Cytophaga**,
N-acetylamino sulfonates, purification methodology 4509.
mutualism, Zoogloea, activated sludge 3463.
- Cytophaga arvensicola sp. nov.**,
succinoglycans decomposition 4764.
- Cytoplasm**,
Mycobacterium bovis, extracts, characterization, antitumor activity 7450.

- plasmic male sterility**,
Pinus arizonicum, plant breeding, susceptibility, downy mildew, *Sclerospora*
graminis 5807
- plasmic membranes**,
 pH dehydrogenase (acceptor), purification, characterization, acetic acid
butylica 4647
Foribium limicola f.sp. *thiosulfatophilum*, lipids, characterization 6589,
Cherichia coli, alkyl dimethylbenzyl ammonium chloride effects on 5184,
Cherichia coli, damage, polyhexamethylene biguanides structure-activity
 relationships, antibacterial activity 7063.
 fructose 5-dehydrogenase, purification, characterization, *Gluconobacter oxydans*
subsp. induratus 4605,
 coenzyme dehydrogenase, purification, characterization, *Pseudomonas fluorescens*
1604,
 coenzyme dehydrogenase, reduction ubiquinone, phospholipids, Triton X-100
 inhibition, *Pseudomonas fluorescens* 955,
 citric dehydrogenase, purification, characterization, *Gluconobacter oxydans*
subsp. suboxydans 4603,
 corylonate dehydrogenase, purification, characterization, *Gluconobacter*
oxydans subsp. melanogenes 4609,
Pseudomonas cepacia, isolation, characterization 4480.
- saline**,
 degradation, soil 5890.
- saline deaminases**,
 purification, characterization, *Salmonella typhimurium* 2758.
- soil**,
 casts, isolation methodology 8170.
- spores**,
 composition, leaf litter, *Abies alba* 2301.
- spore abietis**,
 nker, *Abies concolor*, temperature effects on 4157,
 back, branches, *Araucobium abietinum* parasitism, *Abies magnifica* 5863,
Chrysospora,
 n canker, histopathology, *Populus maximowiczii* 9520.
- spore kunzei**,
 nker, *Picea pungens*, drought effects on 5079.
- spore leucostoma**,
 nker, *Prunus cerasifera*, *Nematoda* effects on pathogenesis 1212.
- static agents**,
Escherichia aeruginosa exotoxins, effects on HeLa cells 1108.
- toxicity**,
 shrimp thuringiensis 5-endoxin, biological control, *Culicidae* 1018,
 cytophosphamide, cytophosphamide, *Escherichia coli* morphology 2444,
 uses, reduction, sewage sludge, wastewater treatment 8950.
- toxins**,
 synthesis, *Escherichia coli*, relationship, *Shigella dysenteriae* 2962,
 stridillium difficile, feces, counter immunoelectrophoresis, immunodiagnostics,
 colitis, man 9306,
 stridillium difficile, production, clindamycin effects on 2091,
 stridillium sordellii, toxicity, media (culture) 6719,
Streptococcus hemolyticus, serotypes, production, antisera, neutralization 8518.
- hlovakia**,
 ercus disease, *Fistulina hepatica*, economic importance 4163,
 wage, poliovirus incidence 3460.
- glie glomerata**,
 ispot, *Stagonospora arenaria*, pathogenesis, visual perception, man 3101,
 t, disease resistance, screening, phenotypes, genotypes 6856,
 m rust, *Puccinia graminis* f.sp. *dactylidis*, genetic analysis 357
- desdroides**,
 actase oxidase, purification, characterization 4607,
 cilia, protoplasts release, culture systems 9074,
Phytophthora thailandensis,
 N-formylserine biosynthesis, isolation, characterization 4415.
- ales quercina**,
 action, *Quercus* 3176.
- age**,
 rape, milk, contamination, bacteria, growth 4832,
 wastewater treatment, capacity, milk 1701.
- industry**,
 at exchange cleaning systems, bacteria contamination 4784,
 ustrial effluents, Wastewater treatment, bibliographies 1695,
 storage, psychrotrophic bacteria growth 9273,
 iter cultures, storage 2033,
 optococcus protoplasts formation, mutanolysin treatment 5414.
- products**,
 toxin M, food contamination, cattle 2938,
 bergillus affluat M1 detection, high-performance liquid chromatography 7614,
 ocation infectious diseases, man 9275,
 uctaria, fermentation effects on, ethanol, volatiles acids 4853,
 obacterium, counting methods 175,
 ectionery, food contamination, coliforms, fecal coliforms 9276,
 d contamination, *Escherichia coli*, coliforms, recovery 4817,
 d contamination, media (isolation), *Enterobacteriaceae* 1791,
 d contamination, psychrotrophic bacteria, reviews 226,
 erene control, microorganisms food contamination 4846,
 ector species 6670,
 tobacillus acidophilus, health, man 4836,
 hrotrophic bacteria, heat resistance, incidence, identification 4814.
- non**,
 zation, bacteria, association dehalogenase biosynthesis 6560.
- ring-off**,
 one max. relationship, *Pythium ultimum* inoculum density 348,
 rgrated control, herbicides, nematodes, crop rotation, soil fumigation,
Cucumis sativus 9473,
 seedlings, *Pythium* infection, greenhouses 1265,
 udotsuga menziesii, *Fusarium oxysporum*, transmission (seed) 4149,
 hum aphidermatidum, Brassica seedlings, new records, Singapore 1259,
 hum ulum, etiology, disease control, *Cicer arietinum* 3911,
 hum ulum, inhibition, *Agrobacterium radiobacter* Polysaccharides seed
 eatments, *Beta vulgaris* 7710,
 zocotia bataticola, disease resistance, seedlings exudates, *Cicer arietinum*
 755,
 zocotia, bedding plants, isolates characterization 2194.
- Damping-off, (continued)**
Rhizoctonia solani, biological control, in vitro, *Trichoderma harzianum* 2854,
Rhizoctonia solani, herbicides effects on, *Vigna unguiculata* 9482,
 seed treatments, fungicides, *Gossypium* 1432.
- Dandelion latent virus**,
 purification, characterization, *Taraxacum officinale* isolates, plants infection
 416.
- Daphnia magna**,
 cell-free system, cytolytic activity, *Escherichia coli* 5170
- Dapstone**,
Mycobacterium, drug sensitivity testing 2467.
- Dark**,
 effects on cucumber mosaic virus infectivity, *Pisum sativum* 7655.
- Darluka filum**,
 hyperparasitism, *Chrysomya abietis*, infection *Picea abies* 7781.
- Dashen mosaic virus**,
 transmission (mechanical), *Richardia africana*, Araceae 9420.
- Data processing**,
 computers, fermenters 9004,
 culture collections, computer applications, computer programs 5391.
- Dating methods**,
 bacteria, fungi, Shroud of Turin 2645.
- Datura innoxia**,
 infection, Hungarian *Datura innoxia* mosaic virus, cytology 3077.
- Datura metel**,
 plant extracts, antiviral activity, gomphrena virus, sunn hemp rosette virus,
 foliar application, *Gomphrena globosa*, *Crotalaria juncea* 7771,
 tomato mosaic virus infectivity, herbicides effects on 7702.
- Datura stramonium**,
 potato virus X infection, RNA polymerase (RNA-dependent) activity 9374,
 root rot, *Verticillium dahliae*, soil acidification inhibition 6837.
- Daucus carota**,
 blight, disease control, fungicides, foliar applications, spraying equipment
 9484,
 roots, phytoalexins, antimicrobial activity, bacteria, fungi 5057,
 stunt, methyl bromide fumigation induction, endomycorrhizas role growth 5913,
 tissue culture, *Agrobacterium tumefaciens* binding, crown gall 2977,
 wound healing, *Cladosporium cladosporioides*, fulvic acid, 6-methoxymellin,
 antifungal activity 4078.
- Daunomycin**,
 antitumor activity, antimicrobial activity, ascorbic acid, dimethyl sulfoxide,
 effects on 8033,
 reduction, NADH dehydrogenase catalysis, *Vibrio parvum* 4633,
 transformation, antibiotic synergism, antibacterial activity, *Streptomyces*
erythromyces sp. nov. 675.
- Daunorubicin**,
 antibacterial activity, structure-activity relationships, *Bacillus subtilis*,
Escherichia coli, *Proteus mirabilis* 4404.
- Dazomet**,
Fragaria vesca red core disease control, agricultural practices association 1415,
 Pinus, leaf litter, effects on soil microorganisms 3250.
- 25-Deacetoxy-25-epi-hydroxylmycin S**,
 synthesis, structure 8861
- Desacetoxycapalosporin C**,
 production, isolation, *Flavobacterium*, *Xanthomonas* 1609.
- DEAE**,
 adjuvants, foot-and-mouth disease virus vaccines, immune response, pigs 2600.
- 1-Deaminogentamicin C2**,
 synthesis, antibacterial activity 6158.
- Debaromyces coenobii**,
 pyruvic acid biosynthesis, *Citrus* extracts fermentation 1822.
- Debaromyces variabilis**,
 formaldehyde dehydrogenase (glutathione), purification, characterization 6516.
- Decamethrin**,
 disease control, *Nephotettix virescens*, vectors, rice lung virus 6847,
 disease control, *Rhizoctonia solani*, Glycine max 8625.
- Decarboxylation**,
 aromatic acid, *Saccharomyces cerevisiae* 1989.
- Decay**,
 association *Inonotus dryophilus* white rot, *Quercus alba*, *Quercus macrocarpa* 5880,
 Berkandera adusta, association frost damage, *Quercus rubra*, *Quercus robur* 6921,
 leaf litter, microorganisms succession, polar environments, lakes 1061,
 minerals 3164,
 Phellinus pini,
 Pinus palustris, brown rot fungi detection, fluorescence microscopy 4047,
 wood, association, *Tsuga heterophylla*, ectomycorrhizas symbiosis, relationship,
 survival 3164,
 wood, bacteria, nutrient requirements 3782,
 wood, *Basidiomycetes* 3768,
 wood, fungi, ecosystem dynamics, forests 8646,
 wood, C/N ratios, *Picea sitchensis*, *Tsuga heterophylla*, forests 527,
 wood, Poria placenta, Gloeophyllum trabeum, pick test assays 4182,
 wood, Poria placenta, indicators, compression pressure tolerance, *Pseudotsuga*
menziesii 6935,
 wood, role melanins, *Phellinus weirii* 6933,
 wood, sap rot, heart rot, oxygen, carbon dioxide effects on 5084,
 Xylaria oxycanthae, *Crataegus monogyna* fruits 1057.
- Decay fungi**,
Abies balsamea, factors affecting disease resistance 8648,
Basidiomycetes, *Quercus robur*, ecological distribution 4158,
 chemotropism, association, wood volatiles 3765,
 post-harvest decay, *Hevea brasiliensis* cellulose, lignins, Malaysia 7791.
- Declorubicin**,
 antibacterial activity, gram-positive bacteria 6220,
 sugars components, structure 6221.
- Decline**,
Ceratocystis fagacearum, *Quercus virginiana*, carbohydrate analysis 1456,
 etiology, rhizosphere microorganisms + phytotoxins + pesticides, *Zea mays* 367,
 pathology, etiology, *Pyrus communis* 3024,
 tomato ring spot virus, *Malus domestica*, *Xiphinema* vectors 4978,
 Verticillium dahliae, *Procerus*, *Pinus strobus*, *Pinus resinosa*, *Pinus nigra*, USA,
 Minnesota 5077
- Decomposition**,
 acetic acid, soil microorganisms, N.M.R. 8664,
Basidiomycetes, ecology, conferences books 8187,
 cellulose, cellulytic microorganisms 2879.

Decomposition, (continued)

- crop residues, *Medicago littoralis*, soil microorganisms, nitrogen sources, uptake, *Trifolium aestivum* 7001
 fungi, branches litter, size distribution, forest floor 8647
 fungi, carbon dioxide gas production, gas chromatography, wood, *Fagus sylvatica* 9530
 fungi, leaf litter, *Abies alba* 2301
 industrial wastes, soil microorganisms, pharmaceuticals, land disposal, reviews 5984
 leaching, plant debris, *Trifolium*, soil microorganisms 566
 leaf litter, forest floor, *Basidiomycetes* 1444
 leaf litter, forest floor, fertilizer applications effects on, *Tsuga heterophylla* 6897
 leaf litter, forests, measuring techniques, *eucalyptus* 1447
 leaf litter, nitrogen balance, nutrient dynamics, *Pinus sylvestris* 3161
 leaf litter, nitrogen cycle, energy flow, forests 2306
 leaf litter, nitrogen cycle, forests 528
 leaf litter, nitrogen cycle, plantations, *Theobroma cacao* 3219
 leaf litter, nutrient dynamics, forests, *Pinus sylvestris*, Sweden 2300
 leaf litter, nutrient dynamics, mineralization, forests 2294
 leaf litter, organic matter, *Pinus sylvestris* 2299
 leaf litter, population levels, soil microorganisms, forests 5855
 leaf litter, role saprophytes, *Abies alba* 6306
 leaf litter, soil microorganisms, analytical techniques 2351
 leaf litter, soil microorganisms, nutrient availability, sulfur, acid rain, pollution effects 9507
 leaf litter, tropical environment, forests, Guyana 8447
 leaves, soil microorganisms, forests, *Eperua falcata* 1439
 lignin, humic acids, melanin, soil microorganisms 1476
 litter fall, nutrient dynamics, forests, floodplains, USA, Illinois 6890
 litter, forests, role, fecal microflora, *Clethrionomys* 1449
 nutrient loss, soil microorganisms, measuring techniques, microcosms 571
 organic compounds, toxicants, soil microorganisms, land disposal, reviews 5977
 organic matter, nitrogen cycle, *Pinus resinosa*, forests 526
 organic matter, soil microorganisms, antibiotics effects on 5922
 organic matter, soil microorganisms, crop residues 2325
 organic matter, soil microorganisms, fertilizers effects on 5979
 organic matter, soil microorganisms, C/N ratios, soil amendment, crop residues 5986
 organic matter, soil microorganisms, tropical environment 4186
Phalaris aquatica, soil microorganisms, phosphorus macromolecules levels 573
 plant debris, organic matter formation, soil 1491
 polysaccharides, organic matter, soil microorganisms 1474
Pseudotsuga menziesii, nutrient dynamics, nitrogen-fixing bacteria, nitrogen fixation 516
 sewage sludge, land disposal, salinity effects on 8955
 soil chemistry mineralization, soil properties, soil microorganisms 574
 soil, mathematical models, books 5448
 soil microorganisms, *Acer rubrum* leaf litter, flooding, nutrient dynamics 4194
 soil microorganisms, crop residues, food processing solid wastes, land disposal, reviews 5981
 soil microorganisms, solid wastes, land disposal, reviews 5976
 straw, soil microorganisms, respiration, C/N ratios 6966
 wood, bacteria, streams sediments 2885
- Decontamination,**
 activated sludge, role, lysis bacteria, USSR 8062
 gastrointestinal tract anaerobic bacteria, use, antibiotics, man, in vitro 8812
 laboratories, paraformaldehyde, Legionella pneumoniae, survival 2459
Salmonella senftenberg, corn soybean milk, use, microwave radiation 3839
 sodium hypochlorite, skin tissue culture, *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Candida albicans* 8092
- Dehydroacetyl-N-5-O-mycaminosyl-10,11-dihydromycinamycin,**
 biosynthesis, *Micromonospora*, characterization 2580
- Deep water,**
Oryza sativa, Cyanophyta association, nitrogen fixation, Philippines 2358
- Defective mutant,**
 biodegradation, serine, production, *Sarcina albidia* 6382
Clostris purpurea, ergot alkaloid biosynthesis 7506
 coagulase biosynthesis, *Staphylococcus aureus*, isolation methodology 9040
 ergosterol biosynthesis, *Saccharomyces cerevisiae*, relationship sterols production 9187
- Defective-interfering particles,**
 respiratory syncytial virus, quantitation, colorimetry, bioassays 7230
- Defense mechanisms,**
Avena sativa leaves, *Pyrenophora teres* infection 1358
 disease resistance, plant diseases, reviews 1336
Hordeum vulgare, powdery mildew, *Erysiphe graminis* f.sp. *hordei* 6838
 Lycopersicon esculentum, enzymes, wilt, *Verticillium albo-atrum* 4077
 Nicotiana glauca, glycoproteins, viruses infection, poly(I)-poly(C)+cyclic AMP+cylic GMP, activation 3136
 Nicotiana tabacum, glycoproteins, glutatination, Phytophthora parasitica, *Pseudomonas solanaceae* 1351
Phaseolus vulgaris, phytoalexins, antibacterial activity, *Xanthomonas campestris* pv. *phaseoli* 1383
Phaseolus vulgaris, phytoalexins induction, infection, *Uromyces phaseoli* 1352
Pinus sylvatica, leaves endopolygalacturonase inhibitor, infection, *Ascochyta* pisi infection 1350
Trifolium aestivum, leaves, lignin induction, *Botrytis cinerea* infection 1368
- Defense secretions,**
 sakuranetin, antifungal activity, *Botrytis cinerea*, *Ribes nigrum* 1379
- Deficient mutant,**
 autolysins, *Bacillus subtilis*, cycloserine bactericidal activity 4331
 gramicidin S, *Bacillus brevis*, phenylalanine metabolism transfer, gramicidin S synthetase activity 8207
 melanins, gene mapping, complementation genetic analysis, association *Gossypium* wilt, *Verticillium dahliae* 6796
 UDP-galactose 4-epimerase, *Salmonella anatum*, antigen O polysaccharides biosynthesis, synthetic galactosyl fipacrenyl diphosphate intermediates 7440
- Defoliation,**
 Gossypium, relationship, *Verticillium dahliae* inoculum quantitation 9390
 Larix, association fungi, *Adelges* grazing 540
 plants, host range, tobacco mosaic virus 4024
Strophostyles helvola, effects on, growth, nodulation, nitrogenase activity, *Rhizobium leguminosarum* nitrogen fixation 5127
- Degradation,**
 association, organic compounds + methanol loading, bioreactors, anaerobic

Degradation, (continued)

- conditions 8940
 2,4-D, carbon dioxide, formation, mineralization, bacteria, soil 5909
 phosphatidyl choline, soil microorganisms, enzymatic activity, nutrient sources, plants 5915
 starch, association ethanol production 1051
- Dehalogenase,**
 biosynthesis, association, dalapon utilization, bacteria 6560
Pseudomonas putida, xenobiotics biodegradation 2884
- Dehalogenation,**
 chlorobenzoates, bacteria 4749
 haloaromatic organic compounds, bacteria, methanogenesis 5290
 halogenated aromatic compounds, lakes, sediments, bacteria 6648
- Dehydration,**
 agar, media, incubation 819
 potato virus Y, potato virus M, potato virus A, preservation, infectivity 2653
Saccharomyces cerevisiae, fatty acid composition, relationship, viability 1839
- 3,12-Dehydro-3-deoxylactarorufin A,**
Lactarius necator, isolation, structure 112
Lactarius necator, isolation, structure 977
- Dehydrogenase,**
 active sites, mycotoxins binding, *Saccharomyces cerevisiae* 7625
 activity, thermophilic microorganisms, soil moisture, soil characteristics, plant communities, deserts 9559
- Deikera intermedia,**
 B-D-glucosidase purification, characterization 5513
- Deletion mutant,**
Escherichia coli, adenylate cyclase, transduction methodology 5401
- Deltamethrin,**
 effects on *Acyrtosiphon pisum*, feeding behavior, potato leaf roll virus, disease transmission 8526
 + nuclear polyhedrosis virus, synergism, biological control, *Mamestra brassicae*, *Spodoptera littoralis* 9208
- Deltocephalus flavicosta,**
 disease transmission, Mycoplasma-like organisms, phyllody, *Catharanthus roseus* 7694
- Dematiaceae,**
 vectors, yellows, mycoplasma-like organisms, disease transmission, *Cocos* 1210
- Dematiaceae,**
 antifungal activity, antifungal agents 7929
- Demethocrypamycin,**
 antifungal activity 6209
- 2-Dehydroxydehydro-griseofulvin,**
 stereospecificity, conversion, *Streptomyces cinereocroatus* 8007
- 3-Dehydro-2,3-di-epitortimicin,**
 antibacterial activity 6198
- 3-O-Dehydro-3-epitortimicin,**
 antibacterial activity 6198
- Demethylation,**
 spectinomycin 1675
 sterols, lycopodes, inhibition, *Saccharomyces cerevisiae* 4117
- O-Dehydrothiornicin,**
 antibacterial activity, Enterobacteriaceae, *Pseudomonas*, *Serratia marcescens*, *Acinetobacter* 4413
- Demosan,**
 antifungal activity, effects on membrane structure, mitochondria 1416
 seed treatments effects on *Glycine* max 5844
- Dendroctonus frontalis,**
 vectors, blue stain, *Ceratocystis minor*, *Pinus* 3168
- Dendroctonus ponderosae,**
 pest attack, plant diseases, infection susceptibility, *Pinus contorta*, *Euromium clavigerum* 8651
 transmission, fungi, pathogenesis, *Pinus contorta* var. *latifolia* 3167
- Dendrolimus spectabilis**
 dose-response effects, *Bacillus thuringiensis*, biological control, mathematical models 8362
- Denitrification,**
 aerobic digestion, sewage sludge 5302
 Alkaligenes, hydroxylamine, pyruvic oxime, nitric-oxide reductase, nitrate reductase, soil 596
 bogs 3213
- Denitrifying bacteria, evolution, reviews 5111,**
 ecological evaluation, denitrifying bacteria 5112
 effects on nitrogen fixation, *Rhodospseudomonas sphaeroides* f.sp. *denitrificans* 5125
 energetics, *Paracoccus denitrificans*, reviews 5117
 enzymes role, pathway, reviews 5118
 fertilizers, soil microorganisms 3246
 forests, clear cutting 6902
 growth conditions, bacteria, transformation, haloaromatic organic compounds 5291
 industrial wastes, carbon sources, denitrifying bacteria 3473
 kinetics, activated sludge, carbon source 5298
 mathematical models, denitrifying bacteria, reviews 5110
 measurements, soils (acid), forests 7844
 nitrogen cycle, agricultural ecosystems, *Oryza sativa* 3224
 nitrous oxide production, fertilizer applications, soil properties, grasslands 6995
Pseudomonas, genetic analysis, reviews 5119
Pseudomonas stutzeri, comparison, *Pseudomonas aeruginosa*, *Paracoccus denitrificans* 5107
 rain forests 2307
 salt marshes soil, factors affecting 2367
 septic tanks, sand filters effects on 786
 soil microorganisms, agricultural practices, crop fields, *Trifolium* 8680
 soil microorganisms, redox potential, flooded soils 6957
 soil, nitrate source effects on 2375
 soil, nitrous oxide measuring techniques, temperature association 612
 soil properties, grasslands, fertilizer applications, denitrifying bacteria 8687
 soil, relationship carbon sources 613
 soil temperature, soil moisture, mathematical models 5960
 Thiobacillus denitrificans, kinetics, wastewater treatment 6243
 wastewater treatment 4447
 wastewater treatment, bacteria 5326
 wastewater treatment, nitrifying bacteria, factors affecting 9797
- Denitrifying bacteria,**
 activity, soil, measuring techniques, relationship, acetylene levels 8689

nitrifying bacteria, (continued)

- carbon sources, soil denitrification 613.
 ay, saline water effects on 5964.
 nitrification, ecological evaluation 5112.
 nitrification, evolution, reviews 5111.
 nitrification, forests, clear cutting 6902.
 nitrification, industrial wastes, carbon sources 3473.
 nitrification, nitrous oxide production, fertilizer applications, soil properties, grasslands 6995.
 nitrification, soil microorganisms, fertilizers 3246.
 nitrification, soil properties, grasslands, fertilizer applications 8687.
 nitrification, wastewater treatment 4447.
 nitrification, identification, soils, *Hordeum vulgare* cultivation 6956.
 nitrification, competition, denitrification mathematical models, reviews 5110.
 nitrification, denitrification, factors affecting 2367.
 soil amendment, fertilizers, manure, redox potential, paddy fields, *Oryza sativa* 9623.
 soil denitrification, nitrate source effects on 2375.
 soil denitrification, nitrous oxide measuring techniques, temperature association 612.
 soil, urea effects on nitrogen balance 2371.
mark,
 hordeum desicion, vesicular-arbuscular mycorrhizas, role, growth, nutrient uptake 5905.
 hordeum vulgare, *Erysiphe graminis* f.sp.hordei infection, conidia dispersal 2128.
 hordeum vulgare, powdery mildew, spores dispersal, spring 2127.
matometry,
 nathochin mycotoxins 287.
nally,
 bacteria suspension culture, solid phase methods 4501.
 noculum, *Pythium aphanidermatum*, *Beta vulgaris*, crop fields, irrigation, USA, Arizona 426.
 noculum, *Pythium ultimum*, relationship, Glycine max damping-off 348.
natty gradients,
 use, separation techniques, *Bacteroides fragilis* forms 6332.
nuclease nucleoside virus,
 nucleases localization, protein A+gold catag 1750.
nucleon, enzyme-linked immunosorbent assay, methodology 4475.
ntal caries,
 association, oral hygiene, fluoride applications, children 8076.
 association, oral hygiene, man, Tuvalu 8078.
 association oral hygiene, mental retardation, children, Finland 8079.
 children, dental hygiene, fluoride treatment, long-term effects 3499.
 children, prevention 6282.
 dental plaque, bacteria, hygiene, children 2642.
 urosis, fluoride water treatment, children 8077.
 nan, antibacterial activity, fluoride dentifrices 3504.
 nan, chlorhexidine, antibacterial activity 3503.
 nan, prevention, calcium fluoride transformation 814.
 index, acid production, sodium fluoride, mouthwashes, man 7210.
 revention, man, fluoride mouthwashes 3501.
 prophylaxis, dental hygiene, man 6279.
 prophylaxis, dental hygiene, man 6280.
 prophylaxis, dental hygiene, man 6281.
 prophylaxis, fluoridation, children 6283.
 prophylaxis, fluoride, dentifrices, mouthwashes, man 8986.
 prophylaxis, fluoride topical application, man 8992.
 prophylaxis, fluoride topical application, teeth, man 8996.
 prophylaxis, fluoride topical applications, children 5352.
 prophylaxis, fluoride treatment, topical application, teeth, man 8995.
 prophylaxis, fluoride treatment, children 8081.
 prophylaxis relationship, *Streptococcus sanguis* oral cavity isolates, amoxicillin antibiotic resistance 8734.
 prophylaxis, sodium fluoride mouthwashes, children 8990.
 prophylaxis, stannous fluoride gels, man 8987.
 prophylaxis, treatment, oral hygiene, man, conferences 8189.
 prophylaxis, use, fluoride varnishes, animal models 8994.
 relationship, oral hygiene, sugars consumption, children 8991.
ntal cement,
 chlorhexidine gluconate, antibacterial activity 677.
ntal disorders,
 acteria, prophylaxis, children 811.
 acteria, prophylaxis, man 809.
 acteria, treatment, children 810.
 prophylaxis, fluoride dentifrices, bacteria 812.
ntal floss,
 dental hygiene, dental plaque, gingivitis, man 8985.
ntal hygiene,
 behavior modification, man 8997.
 children, dental caries, fluoride treatment, long-term effects 3499.
 dental floss, dental plaque, gingivitis, man 8985.
 equipment, topical applications, fluoride, man 5354.
 nan, dental caries prophylaxis 6279.
 nan, dental caries prophylaxis 6280.
 nan, dental caries prophylaxis 6281.
 nan, motor task performance, toothbrushing 7209.
 toothbrushing comparison sodium chloride+hydrogen peroxide, dental plaque, man 8075.
ntal plaque,
 ascorbydines, structure-function relationship, antimicrobial activity, *Streptococcus*, *Actinomyces* 5222.
 dental caries, bacteria, hygiene, children 2642.
 dental hygiene, dental floss, man 8985.
 formation, dentifrices, toothbrushing, effects on, children, reviews 9824.
 formation, mouthwashes, sodium phylate, benzethonium chloride, effects on, man 8986.
 formation, *Streptococcus mutans*, photometry, in vitro 9025.
 inhibition, mouthwashes, copper, zinc, retention, man 8998.
 olates, bacteria, yeasts, nutrient requirements, growth, chemostats methodology 4497.
 olates, octenidine dihydrochloride antibacterial activity 3325.
 nan, control programs 3507.
 al microflora, man, toothbrushing comparison sodium chloride+hydrogen peroxide 8075.
 orodontal diseases, man, disease control, spiramycin 3505.
 revention, man, association chewing gum, xylitol, sorbitol 817.

Dental plaque, (continued)

- removal, toothbrushes design 4463.
Streptococcus mutans levels, stannous fluoride mouthwashes effects on, man 3500.
Streptococcus mutans, man, fluoride effects on 3502.
Streptococcus mutans, *Streptococcus sanguis*, surfactants effects on 8759.
Dental restorative materials,
 calcium hydroxide, antibacterial activity, *Streptococcus sanguis* 6052.
Dental sealants,
 sterilization 6284.
Dentifrices,
 fluoride, dental disorders prophylaxis, bacteria 812.
 toothbrushing, effects on, dental plaque, formation, children, reviews 9824.
Dentistry,
 equipment, disinfection, bacteria, use, water sprays 5335.
 hand disinfection, man 8988.
 instruments, bacteria contamination, teeth, man 2643.
Dentifrices,
 fluoride, antibacterial activity, dental caries, man 3504.
 fluoride, prophylaxis, dental canes, man 8986.
Dentures,
 containers, pathogens isolation, cancer patients 3506.
20-Deoxy-20-dihydro-12,13-deoxy-12,13-dihydrorosaranolide,
 conversion, *Micromonospora polytrita* mutants 8908.
1-(2'-Deoxy-2'-fluoro-β-D-arabinofuranosyl)-5-ethyluridine,
 antiviral activity, cytomegalovirus 9687.
1-(2'-Deoxy-2'-fluoro-β-D-arabinofuranosyl)-5-Iodocytosine,
 antiviral activity, cytomegalovirus 9687.
1-(2'-Deoxy-2'-fluoro-β-D-arabinofuranosyl)-5-Iodouridine,
 antiviral activity, cytomegalovirus 9687.
1-(2'-Deoxy-2'-fluoro-β-D-arabinofuranosyl)-5-methyluridine,
 antiviral activity, cytomegalovirus 9687.
2-Deoxy-D-glucose,
 antiviral activity, mechanisms, herpes simplex virus 1 2486.
3-Deoxy-D-manno-octulosonic acid,
 containing polysaccharides, capsules, *Escherichia coli*, structure 9191.
3-Deoxy-D-manno-octulosonic acid,
 composition, lipopolysaccharides, *Salmonella minnesota* 5536.
 isolation, lipopolysaccharides, *Salmonella minnesota* 5567.
1-(2'-Deoxy-2'-fluoro-β-D-arabinofuranosyl)-5-Iodocytosine,
 antiviral activity, Epstein-Barr virus replication 9688.
1-(2'-Deoxy-2'-fluoro-β-D-arabinofuranosyl)-5-methyluracil,
 antiviral activity, Epstein-Barr virus replication 9688.
1-(2'-Deoxy-2'-fluoro-β-D-arabinofuranosyl)cytosine,
 production, antiviral activity, herpes simplex virus 1, herpes simplex virus 2, structure-activity relationships 5213.
2'-Deoxy-5-(fluoroalkenyl) uridines,
 production, antiviral activity 5210.
5-Deoxy-5-fluoroparacitin A,
 antibacterial activity 8875.
18-Deoxyandrosterone,
 reduction, *Clostridium paraputrificum* 4695.
3-Deoxymycin,
 synthesis 4416.
12-Deoxycardenolids,
 conversion, *Streptomyces purpurascens* 2844.
Deoxycytidylate hydroxymethyltransferase,
 purification, characterization, phase 14 7363.
Deoxyvalenol,
 biosynthesis, *Fusarium graminearum*, grains substrates 8511.
 detection, *Fusarium solani*, association, Zea mays, gas chromatography 7615.
4-Deoxyvalenol,
 food contamination, Gramineae 6687.
Deoxynucleotides,
 endonuclease calcium complex, conformation, N.M.R., *Staphylococcus aureus* 7395.
Deoxypanthenylglucuron,
 isolation, structure, *Streptomyces* 6192.
Deoxypodophyllotoxin,
 antiviral activity, herpes simplex virus 1 infected cells 5206.
 herpes simplex virus 1 infected cells, effects on pathogenesis 5207.
Deoxyradicin,
 structure, *Alternaria helianthi* 2967.
Deoxyribonuclease,
 activity, *Streptococcus* group D, isolation, milk products 2919.
Aspergillus aflatoxins effects on, Mammalia 7613.
 assays, false-negatives, *Staphylococcus aureus* 1076.
Bacillus purification, characterization 1937.
 production, *Staphylococcus aureus*, milk 2965.
Staphylococcus aureus, deflection, heat stability, food contamination 9278.
Deoxyribonuclease BAL 31,
 substrate specificity, *Afteromonas espejana* 6507.
Deoxyribonuclease I,
 indicators, food contamination, *Staphylococcus* 3810.
 purification, characterization, *Bacillus cereus* 8238.
15-Deoxyspergualin,
 synthesis 3717.
Deoxythymidine kinase,
 varcella-zoster virus, detection, infection, diagnosis methodology 9848.
Deoxyuridines,
 analogs, antiviral activity 3357.
Deposita,
 oil, flooding, relationship, hydrogen bacteria activity, population dynamics 3287.
Dermacenter marginatus,
 tissues fixation, disinfection, methodology, diagnosis, tularemia 1774.
Dermatophyte fungi,
 antifungal activity, bifonazole, clotrimazole 7938.
 antifungal activity, Icaicandiol, biosynthesis, *Schefflera digitata* 687.
 antifungal agents, antifungal activity 9682.
 enzymes biosynthesis, media (culture) 3630.
 identification, media (culture) 6354.
 synthetic detergents antimicrobial activity 7958.
3-Desacetylcefotaxime,
 antibacterial activity, antibiotic synergism, cefotaxime, *Proteus morgani*,

Subject Index

3-Desacetylcefotaxime, (continued)

Pseudomonas acidovorans, *Pseudomonas* cepacia 6117.
cefotaxime, antibacterial activity, antibiotic antagonism, antibiotic synergism 6118.

Deschampsia caespitosa,

rhizosphere, *Pseudomonas*, nitrogen fixation 9597

Desferrioxamine,

Streptomyces macronensis, purification, characterization 4419.

Deserti,

dunes stabilization, ecological distribution, soil microorganisms, India 1473.
Egypt, Arab Rep., nitrogen-fixing bacteria, species composition, nitrogen fixation efficacy 9607.

North America, soil, cryptogams characterization 5897.

plant communities, soil microorganisms activity, soil moisture, organic matter 8665.

plant communities, thermophilic microorganisms, dehydrogenase activity, soil characteristics, soil moisture 9559.

Prosopis glandulosa, nitrogen fixation, nitrogen-fixing bacteria 3210.

soil microorganisms, fungal flora, community composition, Kuwait 8673.

soil microorganisms, respiration, seasonal variations 6964.

Desmanthus virgatus,

Leucaena leucocephala Rhizobium inoculation, tests, dilution frequency 1505.

Desmodium,

witches' broom, mycoplasma-like organisms, disease transmission, Orosius

lathopagorum ryukyensis 9424.

11-Desoxy-17-hydroxycorticosterone,

Cunninghamella elegans hydroxylation, stimulation, spores pretreatment 3704.
hydroxylation, association, oxygen, *Pellicularia filamentosa* 4696.

Desulfotomaculum nigrificans,

carbonated beverages contamination 8457.

Desulfovibrio,

cytochrome c3, purification, tertiary structure, electrochemistry, polarography

8192.

interaction, *Methanosarcina barkeri*, methanogenesis, choline 3261.

Methanobacterium, biodegradation, polyethylene glycol, ethylene glycol 8430.

oil contamination, polyacrylamide effects on 5141.

sulfur conversion, soil, continuous culture 7793.

Desulfovibrio desulfuricans,

cell membranes hydrogenase, purification, characterization 4611.

cytochrome c553, redox properties, optical properties 6546.

ferredoxin, amino acid sequence 4552.

Desulfovibrio gigas,

hydrogenase, E.S.R. 74.

hydrogenase, kinetics, assays 7389.

hydrogenase, redox properties, E.S.R., Mossbauer spectroscopy 4634.

iron containing proteins, purification, characterization 5462.

Desulfurococcus mobilis,

ferredoxin, purification, characterization 922.

Desulphovibrio desulphuricans,

immobilized cells, beads, cytochrome C3 hydrogenase activity 4666.

Detergents,

antibacterial activity, *Thiobacillus* 7914.

cleaning systems, sanitation, milking machines 2632.

extraction methodology, light-harvesting proteins, *Rhodospseudomonas sphaeroides*

9028.

industrial wastes, biodegradation, reviews 5579.

reviews, effects on enzymes metabolism, microorganisms 6399.

synthetic, antimicrobial activity 7958.

toxicity testing, biodegradation, *Pseudomonas fluorescens* 2874.

Dethanion,

control, post-harvest decay, *Botrydiopodia theobromae* rot, bananas 5804.

Debraia methylophila,

Chaetomium globosum, structure, x-ray crystallography 2576.

Detoxification,

afatoxin B1, α radiation treatment, mutagenicity testing 3879.

afatoxin B1, ammonium hydroxide, sodium hypochlorite, sodium hydroxide,

mutagenicity, toxicity 278.

afatoxin, ochratoxin A, grain 2063.

cassava, fermentation, linamarase, *Aspergillus sydowi*, *Penicillium steckii* 4778.

cyanide, cyanide hydratase, immobilized cells, fungi 9982.

digestion (anaerobic), pulp mills, industrial effluents 4446.

Hordeum vulgare, contamination, ochratoxin A, *Aspergillus ochraceus*, feeding,

pigs 7623.

mechanisms, chromium resistance, *Saccharomyces cerevisiae* 3272.

radiation, endotoxins, lipopolysaccharides, bacteria 6788.

Detritus,

nutrient dynamics, forest floor, *Pinus contorta* subsp. latifolia, USA, Wyoming

4139.

Deuteromycetes,

airborne microorganisms, media (culture) 4512.

fungal flora, *Fagus grandifolia* bark 1438.

fungal flora, seeds, *Compositae* 7726.

life cycle, pathogenicity, *Aspergillus* sp., *Culicidae* 1012.

plant diseases, ecological distribution, France 2207.

rubber biodegradation 1994.

spores production, use, biological control, *Culicidae* 1807.

virulence, bioassays, methodology, Insecta 1002.

Developing countries,

biological control, weed control, pathogens, plant diseases 7472.

research programs, *Bacillus thuringiensis*, biological control, Insecta 1027.

vectors, disease transmission, biological control, Insecta 1028.

Daw,

effects on *Alternaria alternata* growth, *Helianthus annuus* 6800.

effects on, *Botrytis squamosa*, infection, *Allium cepa* 8591.

effects on, pathogenesis, brown spot, *Septoria glycines*, *Glycine* max 2105.

effects on, pathogenesis, *Cercospora zeae-maydis*, leafspot, *zea mays* 2135.

Dextranase,

biosynthesis, *Aspergillus inusetus*, factors affecting 1920.

Penicillium, electrophoresis 8249.

Penicillium luniculoseum, carbohydrate composition 7340.

poly(anions) inhibition kinetics, fluorescence, *Bacillus subtilis* 79.

Dextranucrase,

inhibitors, riboflavin, structure, *Streptococcus mutans* 3686.

purification, characterization, *Streptococcus mutans* 55.

2,3-Diacetamido-2,3-dideoxy-D-mannuronic acid,

lipopolysaccharides, *Pseudomonas aeruginosa* 3713.

2,3-Diacetamido-2,3-dideoxy-L-galuronic acid,

Pseudomonas aeruginosa, detection 4700.

Diactoxyciprenol,

binding dehydrogenase active sites, *Saccharomyces cerevisiae* 7625.

Diallyl disulfide,

soil amendment, effects on, incidence, *Sclerotium cepivorum* sclerotia 1514.

4,5-Diallyl-2,3-dihydroxybiphenyl ether,

antibacterial activity, *Streptococcus mutans* 2433.

Dialysis,

membranes, interspecific relationships, fungi, methodology 2715.

systems, glutaraldehydes based disinfectants evaluation, antibacterial activity,

Mycobacterium 7207.

4'-6-Diamidino-2-phenylindole,

fluorescence staining, detection, *Chlamydia trachomatis* 3619.

2,7-Diamidino-9H-fluorene-9-one,

antifungal activity, *Candida albicans* 2472.

3,6-Diamino-1,8-naphthaloyl amino acids,

synthesis, antimicrobial activity 702.

2,3-Diamino-2,3-dideoxyglucuronic acid,

biosynthesis, characterization, *Propionibacterium acnes* cell walls

polysaccharides 3657.

4-Diamino-6,7-diisopropyl-pteridine,

drug resistance, clinical isolates, *Vibrio cholerae* 8730.

Diaminopimelic acid,

content, feeds, effects on rumen microorganisms, bacteria, role, markers,

production 6680.

Escherichia coli, detection methodology, gas chromatography 7240.

1,3-Diaminopropane,

incorporation, thermine role, *Clostridium thermohydrosulfuricum* polyamines

biosynthesis 9205.

2,4-Diaminopyrimidines,

binding 4-aminobenzenesulfonamide, antibacterial activity 7083.

D-Disulfide,

biodegradation, aerobic conditions 8436.

Dianthus,

Peronospora infection, pathogenesis 7714.

Dianthus caryophyllus,

carnation latent virus, infection 6806.

detection, carnation mottle virus, carnation ringspot virus, enzyme-linked

immunosorbent assay 831.

disease resistance, rust, *Puccinia dianthi* 8609.

stem nematode, carnation mottle virus, detection, enzyme-linked

immunosorbent assay 7223.

viruses, enzyme-linked immunosorbent assay surveys 1294.

Diapers,

disinfection, chemicals 801.

4,4'-Diapocrotene-4-ol-4'-oic acid,

biosynthesis pathways, *Pseudomonas rhodos* mutants 4568.

4,4'-Diapocrotene-4,4'-dial,

biosynthesis pathways, *Pseudomonas rhodos* mutants 4568.

Diaporphs,

stem canker, *Glycine* max, virulence 3925.

stem canker, pathology, *Helianthus annuus* 8594.

Diaporphs citri,

melanose, *Citrus latifolia*, epidemiology, USA, Florida 9376.

pectinolytic enzymes 5528.

Diaporphs phaseolorum var. caulivora,

stem canker, *Glycine* max, epidemics 9327.

Diaporphs phaseolorum var. sojae,

infection, *Phomopsis sojae*, new records, Hungary 7657.

seed-borne diseases, relationship, symptoms, *Glycine* max, seeds 1143.

Dianthion,

disease transmission, role, *Escherichia coli* food contamination, children,

Bangladesh 4847.

emetics, association, *Bacillus cereus* spores, germination, heat resistance,

association, food contamination, man 193.

isolates, *Escherichia coli*, antibiotic resistance, cattle, juveniles 1534.

man, association, *Escherichia coli* cytotoxins biosynthesis, relationship,

Shigella dysenteriae 2962.

neonates, cattle, *Escherichia coli* isolation, antibiotic sensitivity testing

3283.

Diaryl sulfides,

antifungal activity, dermatophyte fungi 2482.

Diauxie,

Escherichia coli growth, DNA biosynthesis, RNA biosynthesis, protein biosynthesis

8215.

Diazinon,

antibacterial activity, nitrogen-fixing bacteria, *Eichloria crassipes* isolates

8770.

paddy fields soil, effects on nitrogen fixation, heterotrophic bacteria 619.

1-Diisopropyl-2-oxocyclohexanecarboxylic acid,

binding luciferin 2-monooxygenase, subunits, photoaffinity labeling, *Vibrio*

harryi 2800.

Diazomethane,

esterification oligo(D-galactosiduronic acids), pectinesterase effects on,

Aspergillus foetidus 8251.

Diazonium salts,

biosynthesis, aniline derivatives conversion, *Escherichia coli* 3741.

Dibekacin,

antibacterial activity, comparison, tobramycin 2584.

antibacterial activity, urinary tract infection treatment, man 6187.

derivatives, synthesis, antibacterial activity 8853.

fluorescence immunoassays 9785.

+midcamycin, antibiotic synergism, antibacterial activity, *Pseudomonas*

aeruginosa 1689.

Dibenzothiofenones,

biodegradation, hydrocarbon-degrading bacteria, oil dispersants effects on 8717.

Dicarboxamides,

disease control, *Botrytis cinerea*, fruit rot, *Vitis vinifera* 8639.

Difluoroximide,

fungicides, *Botrytis cinerea* resistance, New Zealand 7880.

resistance, association, osmotic pressure, sensitivity, *Botrytis cinerea*,

Penicillium expansum, *Aspergillus nidulans* 6022.

Dicarboximides,

Botrytis cinerea resistance 9650.

resistance, *Botrytis cinerea* 7888.

carboximides, (continued)

resistance, *Botrytis cinerea*, grey mold, greenhouses 6884.
3-Dichloro-5-methoxy-5-methylbenzoic acid,
 biosynthesis, *Penicillium gladioli*, naphthomycin A biodegradation 12.
chlortanid,
 disease control, *Rubus idaeus*, fungi 487.
chloran,
 effects on *Monilinia fructicola*, growth, sporulation, isolation 2282.
 resistance, *Monilinia fructicola*, infection, *Prunus persica*, pathogenicity 2278.
4-Dichloroaniline,
 +humic acids, complex, mineralization, microorganisms 4745.
9-Dichlorobenzidine,
 biodegradation, aerobic conditions 8436.
5-Dichlorobenzoic acid,
 bacteria, dehalogenation, lakes, sediments 6648.
1,14-Dichlorohydroxydicetic acid,
 +*Mortierella isabellina*, biodegradation 6657.
chloroflavan,
 inhibition, rhinovirus replication 6070.
6-Dichlorophenoxy-1,2-nitrophenyl ether,
 inhibition, phosphate-dissolving bacteria growth, rhizosphere, *Triticum aestivum* 4252.
4-Dichlorophenoxyacetic acid,
 biodegradation, *Pseudomonas* 4759.
5-Dichlorophenoxyacetic acid,
 foliar applications, disease control, *Plasmiodiophora brassicae*, clubroot, *Brassica oleracea* 8632.
(3,5-Dichlorophenyl)-2,4-oxazolidinediones,
 derivatives, antifungal activity, *Botrytis cinerea*, structure activity relationships 4300.
(3,5-Dichlorophenyl)-2,5-pyrrolidinediones,
 derivatives, antifungal activity, *Botrytis cinerea*, structure activity relationships 4300.
2-Dichloropropane,
 +methyl isothiocyanate, soil fumigation, *Fusarium oxysporum* f.sp.melonis invasion 5898.
3-Dichloropropane,
 +methyl isothiocyanate, soil fumigation, *Fusarium oxysporum* f.sp.melonis invasion 5898.
 pest control, Nematoda, relationship viruses reservoirs, *Fragaria ananassa* disease control 9479.
chlortovos,
Pseudomonas, biodegradation 5584.
chomitus squelens,
 lignocellulose biodegradation, comparison *Sporotrichum pulverulentum* 1999.
chotomophthora portulacae,
 black stem, *Portulaca oleracea* 9427.
clofenac sodium,
 antibacterial activity 8753.
cytophora indusata,
 β -D-glucan, conformation, antiinflammatory agents 6569.
 mannans, glucans, antitumour activity, mice 7453.
cytoetelium,
 ecological distribution, alpine environments 1482.
 ecological distribution, species composition, alpine environments 1479.
cytoetelium discoidium,
 3,5-cyclic-nucleotide phosphodiesterase isoenzymes, purification, characterization 6452.
 differentiation comparison, cells separation methodology 5435.
 isocitrate dehydrogenase (NAD⁺), purification, characterization 70.
 spores coat protein, fractionation, characterization 1831.
cytoetelium minutum,
 ecological distribution, population density, forest floor 5849.
cytoetelium mucroloides,
 ecological distribution, population density, forest floor 5849.
cyclohexylkarbolidimide,
 sensitivity, *Methanospirillum hungatei* 3303.
dymella applanata,
 infection, *Rubus*, disease resistance 454.
 spur blight, antifungal agents, disease control, *Rubus idaeus* 487.
 spur blight, *Rubus idaeus*, row width, role, disease control, USA, Ohio 7734.
dymocarpus oblonga,
 extracts, antifungal activity 1570.
dymospheria donacina,
 leafspot disease control, *Dioscorea dumetorum*, fungicides use 5061.
ebck,
 Abies, fungi infection, etiology 7784.
 blight, *Cryphonectria parasitica*, virulence, effects on, *Castanea dentata* 8655.
 Botryospheria ribis, pathology, *Eucalyptus camaldulensis* 4159.
 +canker, Rhizosphora, Gambia 1454.
 Cytospora abietis, branches, *Aureobambusa abietinum* parasitism, *Abies magnifica* 5863.
 disease control, plants soil mixtures 4925.
 Eutypa armeniaca, *Prunus amygdalus* 6786.
 Fusarium, role mycotoxins, Pinus 2315.
 Glomerella cingulata, susceptibility, *Camellia reticulata*, pathology 2190.
 induction, Pinus, *Fusarium* extracts 2313.
 Oncobasidium theobromae, Theobroma cacao, China, People's Rep. 7679.
 pathogenesis, Banksia grandis, soils (podzols), effects on, *Phytophthora cinnamomi*, zoospores 5850.
 Phoma costaricensis, seedlings, Coffea 7682.
 Phomopsis, Diplodia gossypii, *Fusarium moniliforme* f.sp.subglutinans, Pinus eliottii, Pinus taeda 5076.
Phytophthora cinnamomi, *Eucalyptus marginata*, disease transmission, pathogenesis 4523.
Phytophthora, disease control, Rhododendron, greenhouses 9419.
Phytophthora parasitica, overwintering, temperature, effects on, Rhododendron 9389.
Phytophthora parasitica, sporangia, survival, pathology, Rhododendron 9386.
 Vitis vinifera, disease control, use, benomyl, USA, Michigan 6881.
offenbachia,
 diagnosis, infection, Mycoplasma-like organisms, viruses 2185.
offenbachia maculata,
 leafspot, *Myrothecium roridum* 5747.
1-Dienoyl-CoA reductase,
 purification, characterization, *Escherichia coli* 1894.

Dietary Intake

formaldehyde, *Platynota idaeus* larvae, association, *Bacillus thuringiensis* subsp.kurstaki toxicity 7498.
 metals, animals, aflatoxicosis interaction 4900.
Diethyl pyrocarbonate,
 α -amylase chemical modification, *Aspergillus oryzae* 1862.
 chemical modification coupling factor 1 histidine residues, inactivation, *Rhodospirillum rubrum* 8285.
Diethyl 3,4-dimethoxybenzalmalonate,
 antifungal activity 8784.
Diftenbachia maculata,
 stem rot, leafspot, *Fusarium solani* 1268.
Differentiation,
 comparison, *Dityostelium discoidium*, cells separation methodology 5435.
 media, Enterobacteriaceae hydrogen sulfide biosynthesis 6603.
 media, yeasts 2722.
 Streptomyces cattleya, factors affecting 6184.
Diffusion tests,
 antibiotic sensitivity testing, factors affecting 9722.
 proteinase, *Bacillus cereus*, *Clostridium botulinum* 1935.
Digestibility,
 carbohydrates, animals, feeding trials, fungi, yeasts 3853.
 crop residues, feeds, sheep 4870.
 fungi, man 5615.
 Gossypium hirsutum crop residues, rumen microorganisms, sheep, pretreatment, ozone, sodium hydroxide 5633.
 Gossypium hirsutum crop residues, rumen microorganisms, sheep, pretreatment, ozone, sodium hydroxide 5634.
 liquids Streptomyces solubles: molasses, cattle 4867.
Digestion,
 fruits, vegetables, anaerobic microorganisms 4843.
 lactose, intestinal microflora, *Lactobacillus acidophilus*, milk, man 7581.
Digestion (aerobic),
 biomass, thermophilic bacteria, sewage sludge 8931.
 solid wastes, activated sludge 1691.
 thermophilic microorganisms, sewage sludge, waste treatment 8939.
 thermophilic bacteria, sewage sludge 4431.
 wastewater treatment, bacteria, survival, association, temperature 2613.
Digestion (anaerobic),
 anaerobic bacteria, sewage treatment, association, temperature 5289.
 aromatic compounds, sediments 4760.
 bacteria, methane reactors, mathematical models 5308.
 bacteria, propionic acid metabolism, kinetics 8944.
 bioreactors, effluents recirculation effects on 9807.
 bioreactors, wastewater treatment 8960.
 cheese whey, chemicals flocculants effects on 9809.
Clostridium, *Bacillus*, animal wastes, pigs 5301.
 comparison, rumen, oxygen effects on methanogenesis, spectrometry 9629.
 crop residues, methanogenesis, inoculation, enumeration 7197.
 industrial effluents, detoxification, pulp mills 4446.
 industrial wastes, methanogenesis, microorganisms, reviews 7196.
 methanogenesis, activated sludge solid wastes 1692.
 methanogenesis, films, wastewater treatment 8957.
 methanogenesis, kinetics, agricultural wastes 9798.
 methanogenesis, oxygen inhibition, in vitro 8058.
 methanogenesis, silage effluents 8963.
 methanogenesis, tanning industrial wastes 8964.
 methanogenesis, use carbon sources, *Spirulina maxima* 825.
 oil, industrial effluents, wastewater treatment 5305.
 petroleum effluents, bioreactors 5287.
 pigs animal wastes, substrates retention, relationship, bacteria levels 9808.
 sewage sludge, metals, chelates, nutrient availability 8947.
 sewage sludge, methanogenesis 8934.
 sewage sludge, nutrient requirements, metals 8946.
 sewage sludge, wastewater treatment 8055.
 sludges, temperature effects on 7199.
 sludges, temperature effects on, kinetics 7200.
 thermophilic bacteria, sewage sludge, heavy metals toxicity 8063.
 waste treatment, bioreactors, methodology, characterization 8928.
 waste water, acids 2603.
 waste water, solid wastes, technology, reviews 9801.
 wastewater treatment, bacteria, survival, association, temperature 2613.
 wastewater treatment, coffee fermentation, fungi 4432.
 wastewater treatment, industrial effluents, molasses 4445.
Digitonin,
 effects on mycoplasma-like organisms virulence, tissue culture, *Nicotiana tabacum* 2175.
Dihydrogadinol oxidase,
 purification, characterization, *Aspergillus terreus* 5493.
Dihydroipoamide dehydrogenase,
 active sites, N-terminal amino acid sequence, homology mercuric reductase, *Pseudomonas aeruginosa* 9175.
Dihydroipoamide reductase (NAD⁺),
Clostridium kluyveri, bioassays, bile acids 4504.
Dihydroipoamide reductase (NAD⁺),
 purification characterization, *Saccharomyces cerevisiae* 4669.
Dihydrophenanthrenes,
Blebitia striata, antibacterial activity 7079.
Dihydrovindoline,
 demethylation, *Streptomyces griseus* 7541.
78-Dihydroxy-kaurenoles,
 biosynthesis, *Gibberella fujikuroi* 2853.
 17 α ,21-Dihydroxy-pregn-4-en-3,20-dione,
 Flavobacterium dehydrogenans, pregnenolone triacetate conversion 5529.
 9-(1,3-Dihydroxy-2-propoxymethyl)guanine,
 antiviral activity, herpesvirus 7111.
 9-(1,3-Dihydroxy-2-propoxymethyl)guanine,
 antiviral activity, cytomegalovirus (human), DNA biosynthesis, protein biosynthesis, cell culture 9689.
 antiviral activity, herpes simplex virus 5217.
2,5-Dihydroxy-4-methoxy-9,10-dihydrophenanthrene,
Dioscorea rotundata extracts, antifungal activity 3339.
3,4-Dihydroxy-5-(p-allylphenoxy) cinnamic aldehyde,
 antibacterial activity, *Streptococcus mutans* 2433.
1,3-Dihydroxy-8-decan-5-on,
 Streptomyces limbratus, biosynthesis, characterization, antifungal activity.

Subject Index

- 1,3-Dihydroxy-8-decan-5-on, (continued)**
antibacterial activity 9201.
- Dihydroxyacetone**
glycerol conversion, immobilized cells, *Chlorella pyrenoidosa*-*Gluconobacter oxydans* 2856.
- 9-(3,4-Dihydroxybutyl)guanine**
antiviral activity, herpes simplex virus replication 5216.
- 3,6-Dihydroxyindazane**
isolation, structure, antibacterial activity, gram-negative bacteria 6218.
- Dihyfolate reductase**
trimethoprim drug resistance mechanisms, bacteria, clinical isolates 5999.
- Dilution**
cell culture, bacteria, automated methods 3600.
frequency tests, *Leucaena leucocephala* *Rhizobium inoculation* *Desmanthus virgatus* 1505.
- Dilution tests**
antibiotic sensitivity testing, factors affecting 9722.
factors affecting, *Streptococcus mitior* penicillin susceptibility 5179.
Vibrio, antibiotic sensitivity testing 3388.
- Dimers**
styrene, biodegradation, *Alcaligenes*, *Pseudomonas* 7558.
- Dimethoate**
antibacterial activity, nitrogen-fixing bacteria, *Eichloria crassipes* isolates 8770.
disease control, *Nephotettix virescens*, vectors, rice tungro virus 6847.
- 2,7-Dimethoxy-5-hydroxy-6-(1-hydroxyethyl)-1,4-naphthoquinone**
biosynthesis, *Hendersoniella tulouidea* 6605.
- 3,4-Dimethoxybenzal-acetylacetone**
antifungal activity 8784.
- 3,4-Dimethoxybenzalacetoacetamide**
antifungal activity 8784.
- 3,4-Dimethoxybenzalacetoacetic acid**
antifungal activity 8784.
- 3,4-Dimethoxybenzalalmonamide**
antifungal activity 8784.
- 3,4-Dimethoxybenzalmononitrile**
antifungal activity 8784.
- Dimethyl dicarbonate**
fungicidal activity, *Saccharomyces cerevisiae*, wine sterilization 2868.
- Dimethyl disulfide**
cheese flavor, ripening, Cheddar cheese 9272.
- Dimethyl suberimidate**
cross-linking, cytochrome c binding sites, reaction centers, *Rhodospseudomonas sphaeroides* 3651.
fatty-acid synthetase cross-linking, quaternary structure, *Brevibacterium ammoniagenes* 2763.
- Dimethyl sulfide**
role, beer, fermentation 8405.
- Dimethyl sulfoxide**
antibacterial agents, antibacterial activity 7919.
antimycobacterial agents, antimycobacterial activity, *Mycobacterium avium-intracellulare* 2401.
effects on antibacterial activity, formaldehyde, hydrogen peroxide, *Bacillus cereus* spores 8772.
effects on, daunomycin, adriamycin, antitumor activity, antimicrobial activity 8033.
use, nystatin extraction, *Streptomyces mycelia* 8669.
- 2,4-Dimethyl-1-cyclohexanol**
Bacillus subtilis hydrolysis, use production 2,4-dimethyl-1-cyclohexanones 1985.
- 2,4-Dimethyl-1-cyclohexanones**
production, use *Bacillus subtilis* hydrolysis 2,4-dimethyl-1-cyclohexanol 1985.
- 2,5-Dimethyl-3-furancarboxaldehyde**
biodegradation, *Nocardia* 4763.
- 5-Dimethylbenzimidazole**
effects on *Propionibacterium cyanocobalamin* biosynthesis 8388.
- 4-(α,α -Dimethylbenzyl)phenol**
derivatives, antifungal activity 9681.
- Dimetridazole**
drug sensitivity testing, *Treponema hyodysenteriae* 8768.
- Dimorphism**
Mucor mucedo, cell walls biosynthesis, fungicides effects on, factors affecting 4310.
yeasts mycelia, assays methodology 9082.
- 3,6-Dinitro-1,8-naphthaloyl amino acids**
synthesis, antimicrobial activity 702.
- 3,6-Dinitrophenol**
effects on, *Gluconobacter oxydans*, growth 6054.
- Dinitrosalicylic acid**
assays, reducing sugars, cations interference, media (culture) 8085.
sugars assays, lignocelluloses hydrolyses, cellulase, *Trichoderma viride* 9073.
- Dinocap**
antibacterial activity, nitrogen-fixing bacteria, *Eichloria crassipes* isolates 8770.
foliar applications, *Begonia*, powdery mildew, antifungal activity 1393.
- Dioseob**
treatment, root rot, *Pythium ultimum*, *Phaseolus vulgaris* 1387.
- Dioxyline amelia**
biological control, *Bacillus thuringiensis*, persistence, *Pinus taeda* 7484.
- Dioscorea**
soft rot, *Botryodiplodia theobomae*, life cycle 5791.
- Dioscorea dumetorum**
leafspot disease control, fungicides use 5061.
- Dioscorea rotundata**
extracts, antifungal activity 3339.
- Diospyros cordifolia**
fruits extracts, antifungal activity, spore germination 8785.
- Diospyros kaki**
black spot, fungicides disease control 8628.
- Dioxidine**
antibacterial activity, mechanisms, association, DNA biosynthesis 1557.
- 2,4-Dioxo-hexahydro-1,3,5-triazine**
treatment, viruses infection, plants 312.
- +guanidine, antiviral activity, viruses infection, *Nicotiana tabacum* 6886.
- 2-(Dipetidy)aminopyrazine**
derivatives, antimicrobial activity 7962.
- Diphenylacetyl-glycine**
antibacterial activity 9660.
- Dipicolinic acid**
Penicillium citreoviride, biosynthesis, role, survival 7445.
- Dipicnane fusca**
rhizosphere microorganisms, nitrogen fixation, soil isolates 592.
- Diplocarpon rosae**
conidia, infection (liquid) storage, culture collections 3629.
infection, *Rosa*, effects on phylloplane microorganisms population dynamics 2200.
- Diplodia goasyipina**
dieback, *Pinus eliotii*, *Pinus taeda* 5076.
- Diplodia maydis**
stalk rot, *Ostrinia nubilalis* infestation effects on, disease resistance, *Zea mays* 361.
- Diplodia natalensis**
Mangifera indica, drug resistance, fungicides 1532.
- Diplodia pinea**
infection, *Pinus radiata*, disease resistance, genetic analysis 3169.
infection, *Pinus radiata* seedlings, relationship, temperature, condensation 7786.
infection, *Pinus radiata* seedlings susceptibility 7787.
- Diplodina acerina**
bark necrosis, *Acer pseudoplatanus*, pathogenesis 5071.
- Dipalpe test**
bacteriuria detection, urine bacteria 9965.
- Dipterocarpus grandiflorus**
Cylindrodium scoparium diseases, Malaysia 2316.
- Diptheroids**
antibiotic sensitivity testing 7977.
- Dipyridamole**
effects on, pseudorabies virus, electron microscopy 3356.
- Direct epifluorescent filter technique**
bacteria enumeration, milking machines, hygiene 6270.
- Disaccharides**
analyses, fungi immobilized enzymes 7342.
- Disc-diffusion test**
aminoglycoside antibiotics, *Streptococcus* group D 2509.
antibiotic sensitivity testing, cephalosporins, statistical analysis 9744.
antibiotic sensitivity testing, temperature effects on 7976.
cefonicid 9742.
ceftriaxone antibacterial activity 7998.
cephalosporins, imoxactam, antibacterial activity 9741.
clindamycin antibiotic resistance, *Bacteroides fragilis* 7031.
cloxacillin, *Staphylococcus aureus*, methicillin sensitivity 639.
clotrimazole, antifungal testing, pipemidic acid, *Pseudomonas aeruginosa* 7916.
moxalactam, antibiotic sensitivity testing, quality control 9745.
norfloxacin, standardization 3324.
Pseudomonas, penicillins antibacterial activity, β -lactamase activity, interpretation 6145.
quality control, antibiotic sensitivity testing 2514.
Staphylococcus aureus, gentamicin biosynthesis, aminoglycoside antibiotics susceptibility 2413.
Streptomyces echinatus echinomyon biosynthesis quantification 4428.
- Discorea**
rust, *Gopiana australis* sp.nov., *Uredo spinulosa* sp.nov., *Gopiana*, *Phaetospora* 4013.
- X disease**
Molluscates, *Collodanus montanus* disease transmission, *Prunus* 4973.
mycoplasma-like organisms, mixed infection, *Spiroplasma citri*, etiology, *Prunus* 3025.
Prunus persica, oxytetracycline hydrochloride treatment 2152.
- Disease control**
Acremonium crocinigenum, leafspot, anilazine, *Syngonium podophyllum* 1423.
antifungal agents fumigants, post-harvest decay, *Pseudotsuga menziesii* wood 1488.
antifungal agents, *Rubus idaeus* 487.
apple mosaic virus, antiviral agents injection, *Malus pumila* 9500.
Ascochyta fabae infection, *Vicia faba* 1138.
association, *Arachis hypogaea* seed treatments, fungicides 2291.
bacteria, fungi, canned food, meat 3807.
bacteria nosocomial infection, man, environmental hygiene 3495.
benomyl, blue mold, *Penicillium expansum*, association, stem rot, *Alternaria alternata*, *Pyrus communis* 9373.
benomyl, captan, orchards, *Malus* 6874.
big vein disease, lettuce big vein virus, methyl bromide, carbendazim, *Lactuca sativa* 6889.
black shank, *Nicotiana tabacum*, fungicides+nematicides 4125.
blight, *Nectria cinnabarin*, *Malus pumila*, benomyl, captan 4120.
blight, *Sclerotium rolfsii*, fungicides, salts, *Trichoderma*, *Poa* 1402.
blister rust, *Cronartium ribicola*, pruning, *Pinus strobus* 1466.
Botrytis cinerea, fruit rot, dicarboximides, *Vitis vinifera* 8639.
Brassica oleracea seeds leafspot, prodione 508.
brown rot, *Phytophthora citrophthora*, citrus, fungicides, applications, methodology 8638.
brown spot, *Phytophthora* mycelia, tillage, *Zea mays* 7736.
cassava common mosaic virus, elimination germplasm, *Manihot esculenta* 1375.
chlorothalonil, *Cercospora arachidicola*, *Cercospora personatum*, leafspot, *Arachis hypogaea* 1409.
chlorothalonil, *Uromyces appendiculatus* var. *appendiculatus* rust, *Phaseolus vulgaris* 9491.
citrus parces greasy spot, fungicides, foliar applications 5834.
citrus tristeza virus infection, Citrus 9378.
Cochliobolus sativus infection, *Hordeum*, seed treatments, fungicides 1429.
Coffee arabica, leaf rust, *Hemileia vastatrix* 4076.
corky ringspot, *Solanum tuberosum* 3112.
corky root, *Lyopocarpus esculentum* 1264.
cowpea banding mosaic virus infection, *Vigna unguiculata*, insecticides, vectors, *Aphis craccivora* 5808.
Cronartium ribicola, blister rust, pruning, *Pinus monticola* 1457.
damping-off, *Pythium ultimum*, etiology, *Cicer arietinum* 3911.
dental plaque periodontal diseases, man, spiramycin 3505.
dieback, *Vitis vinifera*, use, benomyl, USA, Michigan 6881.
diseases, *Gossypium* seedlings, bacteria, fungi 2225.
downy mildew, *Pseudoperonospora humuli*, fungicides, *Humulus lupulus* 1403.
Endothia parasitica blight, virulence, *Castanea dentata* 6922.
Endothia parasitica, virulence, blight, *Castanea dentata*, reviews 4165.
fireblight, *Erwinia amylovora*, bactericides, *Pyrus* 1207.
fireblight, *Erwinia amylovora*, fungicides, screening, seedlings, *Malus pumila*

Disease control, (continued)

1406.
 food poisoning, man, food contamination, bacteria 3496.
 agania ananassa, viruses reservoirs relationship, Nematoda 1,3-dichloropropene pest control 9479.
 agania vesca red core, agricultural practices association, diazomet, fenamnosulf 1415.
 pest damage, plants, ice nucleation bacteria 4130.
 pit rot, fungicides, *Ficus carica* 1396.
 pit rot, *Malus* 3031.
 pit rot, *Mycosphaerella pomii*, fungicides, *Malus pumila* 1392.
 ring, baycot, plant diseases, *Malus pumila* 1421.
 ring, clubroot, *Brassica oleracea*, transplantation 4073.
 ring, factors affecting, barley storage 7724.
 ring, forestry 537.
 ring infection, blueberries, post-harvest decay, carbon dioxide storage 3106.
 ring infection, Citrus, fungicides 4112.
 ring infection, cultivation, vegetables 2209.
 ring infection, *Lolium perenne* 377.
 ring, plant diseases, Gramineae 5829.
 ring, plant diseases, *Hevea brasiliensis* 5087.
 ring, post-harvest decay, fruits 1327.
 ring, ring, anthracnose, *Xanthomonas phaseoli*, leafspot, *Vigna radiata* 509.
 ring, black spot, *Diospyros kaki* 6282b.
 ring, *Brassica oleracea*, leafspot, *Pteroparia brassicae* 2276.
 ring, *Colletotrichum coffeaeum* coffee berry disease, *Hemilea vastatrix* leaf rust, *Coffea arabica* 1341.
 ring, downy mildew, powdery mildew 1433.
 ring, *Erysiphe polygoni*, powdery mildew, *coriandrum sativum* 493.
 ring, late post-harvest decay, cantaloupes 1399.
 ring, late blight, *Solanum tuberosum* 1389.
 ring, *Monilia fructicola*, brown rot, orchards, *Prunus persica* 1405.
 ring, *Phoma tracheiphila*, mal secco disease, citrus 4101.
 ring, *Phragmidium mucronatum* rust, *Rosa laxa* 4115.
 ring, *Phytophthora nicotianae* var. *parastica*, root rot, seedlings, citrus lemon 484.
 ring, plant diseases 7758.
 ring, plant diseases 7759.
 ring, plant diseases, foliar applications 8636.
 ring, powdery mildew, *Hordeum vulgare* 9489.
 ring, *Ravenella lagerheimiana* infection, *Enterolobium cyclocarpum* 8656.
 ring, *Rhizoctonia solani* infection, *Helianthus annuus* seedlings 6870.
 ring, *Sclerotinia sclerotium* infection, *Brassica napus*, spear traps 8634.
 ring, seed treatments, *Glycine max* 1428.
 ring, *Gramineae* root rot, nitrapyrin, *Triticum aestivum* seedlings 4109.
 ring, *Oxytropis*, quitozene + ferbam, bulbs, *Lilium* 1427.
 ring, *Lycopersicon esculentum*, *Citrus* vulgaris, use, antagonists 1354.
 ring, *Gaeumannomyces graminis*, take-all, *Pseudomonas* seed treatments, *Triticum aestivum* 3158.
 ring, *Gaeumannomyces graminis* var. *tritici*, take-all, benomyl, carbendazim, *Triticum aestivum* 507.
 ring, grapevine fanleaf virus, grapevine leaf roll virus, grapevine vein banding virus, heat treatments, *Vitis vinifera* 2245.
 ring, grapevine fanleaf virus infection, *Vitis vinifera* 4131.
 ring, mold, *Botrytis cinerea*, *Cyclamen graecum*, iprodione, procymidone, vinclozolin 1424.
 ring, treatments, *Saccharum*, ratoon stunt, bacteria 9468.
 ring, *Helianthus annuus* downy mildew, metalaxyl 1418.
 ring, *Aspergillus niger* crown rot, *Aspergillus flavus* root rot, *Arachis hypogaea* 2277.
 ring, cucumber mosaic virus infection, *Cucurbita* 9483.
 ring, vectors, rice tungro virus infection, *Oryza sativa* 8613.
 ring, post-harvest decay, peaches 4129.
 ring, blight, *Cucumis melo*, factors affecting pesticide applications 3150.
 ring, leafspot, *Dioscorea dumetorum*, fungicides use 5061.
 ring, Pestalotia palmorum, *Helminthosporium*, fungicides, *Cocos nucifera* 1391.
 ring, sour rot, post-harvest decay, CGA-64251 1322.
 ring, *Sphaeria maculans* reproduction stages suppression, chemicals treatment, *Brassica napus* crop residues 463.
 ring, post-harvest decay, *Sclerotinia minor*, metham sodium, *Lactuca sativa* 4002.
 ring, smut, *Ustilago*, seed treatments, *Triticum aestivum* 1431.
 ring, chlorotic mottle virus infection, *Zea mays* 1191.
 ring, quaternary ammonium compounds, test clips, antibacterial activity, cattle 1728.
 ring, *Pythium blight*, *Phaseolus vulgaris* 9493.
 ring, *ethanum* sodium, *Arachis hypogaea*, *Pythium myrtillosum* pod rot, *Verticillium wilt* 1411.
 ring, methodology, maize streak virus infection, *Zea mays* 461.
 ring, microorganisms, pruning wounds, fungicides treatment 7767.
 ring, brown rust, nitrogen fertilizers, fungicides, *Hordeum vulgare* 5838.
 ring, *Yersinia-like* organisms, yellows, oxytetracycline, *Cocos nucifera* 1206.
 ring, blight, *Cylindrocylindrium macrosporum*, *pinus* 7782.
 ring, *Schizaphis graminum*, *Rhopalosiphum maidis*, vectors maize dwarf mosaic virus, *Zea mays* 6843.
 ring, nematical plants, fungicides use 5058.
 ring, *carica rosette* mosaic virus infection, *Vitis labrusca*, vectors, *Xiphinema americanum* 5842.
 ring, *arisa griffithii*, anthracnose, stem rot, prochloraz 6833.
 ring, *Pseudotsuga gaeumannii* needlecast, chlorothalonil aerial applications, *Naucleopsis*, USA, Washington 6879.
 ring, *aseolus vulgans*, bacteria blight 9462.
 ring, *homopsis* citri post-harvest decay, fungicides, grapefruits, USA, Texas 4049.
 ring, *Phytophthora citrophthora*, brown rot, metalaxyl, fruits 1419.
 ring, *Phytophthora dieback*, *Rhododendron*, greenhouses 9419.
 ring, *Phytophthora infestans* blight, *Solanum tuberosum*, metalaxyl 9494.
 ring, *Phytophthora palmivora* canker, maneb, chlorothalonil, *Carica papaya* 5058.
 ring, *Phytophthora palmivora* canker, *Theobroma cacao*, metalaxyl treatment 1417.
 ring, *Phytophthora palmivora*, root rot, *Carya* 1213.
 ring, *Phytophthora* root rot, trees, silviculture 2217.
 ring, *Phytophthora*, powdery mildew, *Erysiphe polygoni*, sulfur fungicides 4123.
 ring, ant diseases, bactericidins, bacteriocinogeny 5843.
 ring, ant diseases, suppression, soil, books 904.
 ring, ant viruses, mineral oil, vegetables oils 5813.
 ring, benzimidazole derivatives, *Rhizoctonia* 490.

Disease control, (continued)

post-harvest decay, guavas, benomyl, guazatine 6832.
 post-harvest decay, *Penicillium expansum*, calcium chloride, apples 5798.
 potato virus X, ribavirin, 5-azadihydroauracil, *Nicotiana tabacum* 2271.
 powdery mildew, greenhouses plants, ectaconazole treatment 5004.
 powdery mildew, *malus* 4113.
 powdery mildew, *Pisum sativum*, antifungal agents, *Erysiphe polygoni* 8637.
 powdery mildew, *Podosphaera leucotricha*, fungicides, *Malus pumila* 2280.
 powdery mildew, *Podosphaera leucotricha*, fungicides, *Malus pumila* 2281.
 powdery mildew, *Sphaerotheca fuliginea*, triflorine, *Cucumis sativus* 2275.
 powdery mildew, *Sphaerotheca pannosa* var. *rosae*, *Rosa* 9385.
 prochloraz, dry bubble disease, *Verticillium fungicola*, wet bubble disease, *Mycogone perniciosa*, cobweb disease, *Hymocys rosellus*, *Basidiomycetes* 6824.
 prochloraz, fungi infection, *Agaricus* 4118.
Pyrenophora teres, *Pyrenophora graminea*, infection, heat treatments, *Hordeum vulgare*, seeds 1430.
Pyricularia oryzae, blast, fungicides, *Oryza sativa* 8630.
Rhizoctonia solani, sheath blight, *Oryza sativa*, overwintering, burning 4953.
Rhynchosporium secalis leaf blotch, *Hordeum*, antifungal agents treatment timing 488.
Rhynchosporium secalis, leaf blotch, *Hordeum vulgare* 5809.
 rice tungro virus, insecticides, vectors, *Nephotettix virescens* 6847.
 root rot, *Beta vulgaris*, sulfur 3157.
 root rot, *Glycine max*, *Lycopersicon esculentum*, *Solanum melongena* 6872.
 root rot, *Glycine max*, fungicides seed treatments, *Oryza*, Ohio 7772.
Rosa canker, fungicides 1410.
 rust, *Conararium quercum* f.sp. *fusiforme*, triadimefon, *Pinus eliottii* var. *elliottii* 9516.
 salmonellosis, Salmonella contamination, abattoirs, turkeys 2050.
 scab, *Venturia inaequalis*, pathogenesis, mathematical models, *Malus pumila* 5734.
Sclerospora graminicola downy mildew, *Pennisetum americanum*, fungicides 4116.
Sclerospora graminicola downy mildew, *Pennisetum americanum*, metalaxyl seed treatments 9502.
Sclerotinia minor blight, *Arachis hypogaea*, fungicides 4100.
Sclerotinia minor blight, chlorothalonil, *Arachis hypogaea* 3151.
Sclerotium rolfsii infection, *Agrostis palustris*, antifungal agents 1397.
 seed treatments, *Pseudomonas syringae* pv. *lachrymans* leafspot, *Cucumis sativus* 9501.
 seed-borne diseases, fungicides, *Oryza sativa*, *Glycine max*, *Triticum aestivum* 1434.
Septoria nodorum glume blotch, *Triticum aestivum*, crop rotation, seed treatments 9466.
 sheath blight, *Cortium asakii*, fungicides, *Oryza sativa* 3148.
Simulium damnosum vectors, biological control, *Bacillus thuringiensis* 1020.
 speckled leaf blotch, powdery mildew, *Triticum aestivum*, *Hordeum vulgare*, yield, models 7671.
Spinacia oleracea, white rust, blue mold, metalaxyl + chlorothalonil treatment 5064.
 spur blight, *Rubus idaeus*, role, row width, *USA*, Ohio 7734.
 stem rot, *Brassica napus*, agricultural practices, *Phoma lingam* 495.
 stripe rust, *Puccinia striiformis*, sprays, *Triticum aestivum* 5722.
 take-all, *Gaeumannomyces graminis* use, *Pseudomonas*, *Triticum aestivum* 4090.
Tilletia controversa bunt, fungicides seed treatments, *Triticum aestivum* 4110.
Tilletia controversa bunt, *Triticum aestivum*, fungicides foliar applications 4111.
 tobacco mosaic virus, seed treatments, fungicides, *Crotalaria juncea* 1436.
 tomato leaf curl virus infection, *Lycopersicon esculentum*, factors affecting 8614.
 triadimefon, *Mycosphaerella muscicola*, leafspot, *Musa* 4127.
Triticum aestivum, fungicides 2273.
Triticum aestivum powdery mildew, triadimefon 1422.
Triticum plant diseases, fungicides 5830.
Triticum stem rust pathogens, *Barberis vulgaris* eradication, *USA* 1389.
 tungro virus, host plants, pest resistance, *Nephotettix virescens*, *Oryza sativa* 5548.
 urea, fenarimol, baycot, *Venturia pirina*, scab, *Pyrus communis* 1395.
 use, insecticides, fungicides, planting dates, *Hordeum vulgare* 7676.
 vaccines, hepatitis B virus, man 3457.
 vapam, *Sclerotium cepivorum* white rot, *Allium* 9492.
 vectors, microorganisms, insects 6622.
 vegetables, plants, infection, fungi, bacteria 2267.
 viruses, antisera, ornamental plants 2270.
 viruses, plant breeding, gemplasm, crops 2242.
 viruses, plant diseases, repellents, dodecanoic acid, polygodol, *Myzus persicae*, vectors 459.
 white rot, *Bacillus subtilis* seed treatments, *Allium cepa* 5848.
 white rot, *Sclerotium cepivorum*, pathology, *Allium cepa*, reviews 1260.
 wilt, *Pinus*, *Bursaphelenchus xylophilus*, pesticides uptake 5877.
Xanthomonas campestris pv. *vesicatoria* spot, *Piper nigrum*, association, copper sensitivity 6878.
 Disease reservoirs
 barley yellow dwarf virus, Gramineae, USA, Indiana 1158.
Festuca arundinacea, barley yellow dwarf virus, USA, Missouri 1164.
 pea streak virus, alfalfa mosaic virus, *Medicago sativa* 3929.
 role, *Arachis chalcone*, peanut mottle virus isolation, pathogenicity 6743.
 tomato ringspot virus, *prunus* 1209.
 Disease resistance
Abelmoschus esculentus, *Fusarium oxysporum* f.sp. *vasinfectum* wilt 7740.
Abies balsamea, decay fungi, factors affecting 8648.
Alternaria helianthi, infection, *Helianthus* 5766.
 L-2-aminoxy-3-phenylpropionic acid, inhibition, phytoalexins, *Glycine max*, effects on, *Phytophthora megasperma* f.sp. *glycinis* 3907.
Ameylosis transiens, biological control, pathogens, *calycivir* 5549.
Arachis hypogaea germplasm, *Cylindrocylindrium crotalariae* infection 474.
Arachis hypogaea, rust, *Puccinia arachidis* 4063.
Aspergillus flavus, aflatoxins levels, *Zea mays* 5553.
 assays, wilt, *Corynebacterium insidiosum*, *Verticillium albo-atrum*, *Medicago sativa* 4063.
 association, *Dioscorea rotundata* extracts antifungal activity 3339.
 association, virulence, downy mildew, *Bremia lactucae*, *Lactuca sativa* 6820.
Avena sativa, *Puccinia coronata*, virulence 8610.
 bacteria, fungi, phytoalexins biosynthesis, energetics, plant breeding 4059.
 barley yellow dwarf virus, plant breeding, *Triticum aestivum* 445.
 beet yellows virus, plant breeding, *Beta vulgaris* 2244.
 Beta, plant breeding, root rot, *Erwinia* 1376.
 black shank, *Phytophthora parasitica*, *Nicotiana*, genetic analysis 1340.

Disease resistance, (continued)

- blackeye cowpea mosaic virus, cowpea aphid-borne mosaic virus, inheritance, Phaseolus vulgaris 4088.
 blight, Xanthomonas campestris, genes, genetic analysis, Oryza sativa 9459.
 blight, Xanthomonas malvacearum, genetic analysis, Gossypium hirsutum 2254.
 blister rust, *Phoma lentis*, USA 8519.
 blue mold, *Peronospora effusa*, genetic analysis, *Spinacia oleracea* 1337.
 Botrytis allii, rust, *Allium cepa* 3966.
 Brassica napus, haploidy, heredity, *Phoma lingam* 450.
 breeding, Brassica oleracea, Brassica rapa, Plasmodiophora brassicae clubroot 9477.
 breeding, Vigna unguiculata, cowpea aphid-borne mosaic virus, cowpea mosaic virus, bacteria, infection 3138.
 Bromia lactucae, analysis, Lactuca 6865.
 Bromus inermis, brown spot, inheritance 6868.
 canker, Cryphonectria cubensis, role, Eucalyptus phenols 5814.
 canker, Nectria galligena, Pectilicia malicorticis, Phytophthora cactorum, Stereum purpureum, Malus pumila 1357.
 Capsicum annuum, leafspot, Xanthomonas campestris pv. vesicatoria 7742.
 Capsicum, tobacco mosaic virus infection 1335.
 Castanea dentata, blight, Endothia parasitica, virulence 8623.
 Cercospora arachidicola, Arachis, interspecific hybridization, plant breeding 7727.
 Cercospora arachidicola, leafspot, sporulation screening, Arachis hypogaea 5047.
 Chrysanthemum morifolium, Fusarium oxysporum f.sp. chrysanthemi inoculation 4999.
 Cicer arietinum, Ascochyta blight, inheritance 6867.
 Citrullus lanatus, wilt, Fusarium oxysporum f.sp. niveum, inoculum, effects on 5774.
 Citrus sinensis, Citrus limonia, leaves, mesophyll, Xanthomonas campestris 456.
 Coffea canephora, leaf rust, Hemileia vastatrix, light intensity effects on 3962.
 Colletotrichum orbiculare, inheritance, Coffea arabica 6864.
 Colletotrichum fragariae, anthracnose, screening, Fragaria 1258.
 Colletotrichum trifolii, anthracnose, Medicago sativa 5046.
 Colletotrichum trifolii infection, screening rates, Medicago sativa 477.
 cowpea chlorotic mottle virus infection, Vigna unguiculata, transmission (seed) 332.
 crop plants, soil-borne diseases, genetic analysis 6850.
 crown rust, Puccinia coronata f.sp. lolii, Lolium perenne, Lolium multiflorum 4079.
 cucumber mosaic virus infection, Cucurbitaceae, plant breeding 3118.
 Cucumber mosaic virus, pathogenicity, Lactuca saligna, genetic analysis 3135.
 Cucumis melo, downy mildew 1358.
 Cucumis melo, Pseudoperonospora cubensis inoculation 7752.
 Cucumis sativus, Fusarium oxysporum f.sp. cucurumerum, pathogens induction 2262.
 Cyphomandra betacea, wilt 1364.
 defense mechanisms, plant diseases, reviews 1336.
 development, Triticum, brown rust, stripe rust, germplasm screening, field trials, India 5726.
 Didymella applanata infection, Rubus 458.
 downy mildew, Plasmopara halstedii, Helianthus annuus 4066.
 Drechslera oryzae infection, Oryza sativa, phytoalexins inducers use seed treatments, induction, hypersensitive response 2292.
 Elsinbe brasiliensis elongation plant diseases, inheritance, Manihot esculenta 6828.
 Erysiphe graminis f.sp. tritici, infection, genes, Triticum aestivum, cell walls chemical composition association 9476.
 Erwinia stewartii wilt, plant breeding, Zea mays 1346.
 Erysiphe chlochoracearum, powdery mildew, Helianthus 1278.
 Erysiphe graminis f.sp. hordei, powdery mildew, induction Erysiphe graminis f.sp. hordei incompatibility races, Hordeum vulgare 1362.
 Erysiphe graminis f.sp. tritici powdery mildew, Triticum aestivum, inheritance 9464.
 Erysiphe polygoni, powdery mildew, Lupinus 9467.
 Eucalyptus regnans, Phytophthora cinnamomi infection, intraspecific relationships 8653.
 factors affecting, Triticum aestivum, footrot, Pseudocercospora leucomorpha 4087.
 Festuca arundinacea, plant breeding, crown rust, Puccinia coronata 448.
 fungi, infection, Maleleuca quinqueveneria 5086.
 fungi pathogens, association, Hordeum spontaneum fertility 6759.
 fungi, plant breeding, Gramineae 2241.
 Fusarium oxysporum f.sp. ciceri, wilt, inheritance, Cicer arietinum 4062.
 Fusarium oxysporum f.sp. lupini, wilt, Lupinus albus 9461.
 Fusarium udum, wilt, screening, Cajanus cajan 1367.
 fusiform rust, genotype-environment interactions, Pinus taeda 6908.
 fusiform rust, pinus 4148.
 genes, Avena sativa, virulence, Puccinia coronata 5035.
 genes identification, Oryza glaberrima, rice yellow mottle virus infection 4968.
 genes, Lactuca sativa, downy mildew, Bromia lactucae 3126.
 genetic analysis, wheat mosaic virus infection, Triticum aestivum 2240.
 genetic factors, host-pathogen interactions, plants 468.
 genetic relationship, disease tolerance, Capsicum annuum x Capsicum chinense, pepper mottle virus 4093.
 germplasm, Sclerospora graminicola downy mildew, Pennisetum typhoides, productivity 47.
 Glycine max, Phytophthora megasperma f.sp. glycinea infection, host-pathogen interactions 8615.
 Glycine max, Phytophthora megasperma var. sojae, agglutinins relationship 1371.
 Glycine max, Sclerotinia sclerotiorum infection 1359.
 Glycine max, soybean mosaic virus infection 7733.
 Glycine max, stem rot, measuring techniques 8689.
 Gnomonia leptostyla anthracnose, genetic analysis, selection, Juglans nigra 5874.
 Gossypium hirsutum, Verticillium dahliae infection, Rotylenchulus reniformis effects on 8612.
 Gossypium, wilt, Verticillium dahliae, Fusarium oxysporum f.sp. vasinfectum 4086.
 Gramineae, leaf rust, Puccinia, histology 2264.
 grassy stunt virus, inheritance, Oryza sativa, Oryza nivara 5037.
 gummosis, Botryosphaeria dothidea, Prunus persica 2249.
 Helminthosporium sativum leafspot, heredity, Triticum aestivum 3121.
 Hemileia vastatrix, leaf rust, leaves age effects on, Coffea arabica 4976.
 Heterobasidion annosum root rot, surveys, Picea abies, Norway 6918.
 Hordeum, Erysiphe graminis f.sp. hordei infection, association leaves developmental stages 483.
 Hordeum, genetic analysis, Erysiphe graminis powdery mildew 8627.
 Hordeum, powdery mildew, Erysiphe graminis, genetic analysis 471.
 Hordeum vulgare, Erysiphe graminis f.sp. hordei infection, genetic control 6840.

Disease resistance, (continued)

- Hordeum vulgare, Erysiphe graminis f.sp. hordei infection, association, M1-a locus 8611.
 Hordeum vulgare, esterase, proteins, powdery mildew, Erysiphe graminis f.sp. hordei 4060.
 Hordeum vulgare, genes, selection, virulence, Erysiphe graminis f.sp. hordei, powdery mildew 8550.
 Hordeum vulgare, genetic analysis, virulence, Erysiphe graminis f.sp. hordei 8607.
 Hordeum vulgare, powdery mildew, association, age, growth rate, carbohydrate composition, amino acid composition 8557.
 Hordeum vulgare varieties, powdery mildew, mechanisms 4089.
 induction, Colletotrichum lagenarium infection, Cucumis sativus 444.
 induction, Cucumis sativus, Fusarium oxysporum f.sp. cucurumerum wilt 465.
 infection, fungi, bacteria, viruses, stimulation, plants 3120.
 inheritance, Vicia faba, rust, Uromyces viciae-fabae 2253.
 Isanopsis griseola, Colletotrichum lindemuthianum, genetic variance, Phaseolus vulgaris 5683.
 Kabatiella zaeae, eyespot, plant breeding, Zea mays 9456.
 leaf rust, Eserohium turcicum, HTN gene, Zea mays 5710.
 leaf rust, genetic variance, Triticum aestivum 1161.
 leaf rust, Hemileia vastatrix, detection, methodology, Coffea canephora 2261.
 leaf rust, Hordeum, genes, histology 2265.
 leafspot, Cercospora arachidicola, genetic analysis, Arachis hypogaea 452.
 leafspot, leaf rust, sheath blight, Sorghum vulgare 1366.
 Lespedeza cuneata, Rhizoctonia blight, plant breeding 6866.
 Lolium, Puccinia grisea infection 1363.
 Lycopersicon esculentum cultivars, Verticillium dahliae wilt 5043.
 Lycopersicon esculentum, speck 1381.
 Lycopersicon esculentum, tobacco mosaic virus infection, association, fruits, ripening defects 4094.
 Lycopersicon esculentum, wilt, Pseudomonas solanacearum 1380.
 Lycopersicon esculentum, wilt, Pseudomonas solanacearum, grafting 3130.
 Lycopersicon pimpinellifolium, Pseudomonas solanacearum wilt 6791.
 maize dwarf mosaic virus, genes, levels, genetic analysis, plant breeding, Zea mays 4092.
 Malus, Podosphaera leucotricha powdery mildew 7739.
 Malus rootstocks, canker, Basidiomycetes 2259.
 Manihot esculenta, Xanthomonas campestris pv. manihotis infection 2230.
 mechanisms, Colletotrichum coffeae, seedlings, Coffea arabica 479.
 Medicago sativa, infection, bacteria, fungi 7750.
 Medicago sativa, leafspot, screening 6860.
 Medicago sativa, wilt, Fusarium oxysporum f.sp. medicaginis, virulence 3914.
 Medicago sativa, wilt, Fusarium oxysporum f.sp. medicaginis, soil moisture, effects on 4097.
 Melampora medusae leaf rust, role, temperature, Populus deltoides, Populus euramericana 6911.
 Meloidogyne incognita acrita infection + Fusarium oxysporum f.sp. vasinfectum wilt, Gossypium hirsutum 7739.
 Meloidogyne incognita, association potato virus Y infection, Nicotiana tabacum 9433.
 Meloidogyne incognita, relationship, potato virus Y infection, Nicotiana tabacum 9432.
 mildew + frost, Vitis vinifera, nitrogen metabolism 7688.
 mildew, Erysiphe graminis, relationship, cytokinins levels, grain, Triticum aestivum, Hordeum vulgare 2249.
 Morus, extracts antifungal activity 4084.
 Nectria antigonia, benzoic acid production, fruits, Malus pumila 4081.
 Nicotiana, plant breeding, blue mold, powdery mildew, wildfire 1339.
 Nicotiana, Pseudomonas fluorescens, induction 3131.
 Nicotiana, Pseudomonas fluorescens, induction 3133.
 Nicotiana tabacum, Erysiphe chlochoracearum, white mold 4091.
 Nicotiana tabacum, host-pathogen interactions, tobacco mosaic virus 2170.
 Nicotiana tabacum, role, N⁺ gene, association, tobacco mosaic virus coat protein 6848.
 Nicotiana tabacum, white mold, Erysiphe chlochoracearum 4074.
 Oryza sativa, genetic relationship, rice stripe virus, rice dwarf virus 6773.
 Oryza sativa, inheritance, Xanthomonas campestris pv. oryzae blight 9364.
 Oryza sativa, Puccinia oryzae blast, USA 5711.
 Oryza sativa, tungro virus 5812.
 Oryza, Sclerotium oryzae stem rot 9469.
 peanut mottle virus, soybean mosaic virus, inheritance, Glycine max 9463.
 Peronospora parasitica, downy mildew, Brassica napus, Brassica oleracea 4056.
 Peronospora sativa, downy mildew, penetration, Pisum sativum 3142.
 Phakopsora pachyrhizi rust, inheritance, genetic analysis, Glycine max 6858.
 Phaseolus vulgaris, Colletotrichum lindemuthianum 4068.
 Phaseolus vulgaris, phytoalexins, anthracnose, Colletotrichum lindemuthianum 1360.
 Phaseolus vulgaris, Pseudomonas vulgaris blight, bean common mosaic virus mosaic disease, Colletotrichum lindemuthianum anthracnose 5815.
 Phaseolus vulgaris, Xanthomonas campestris pv. phaseoli blight, tropical environments 5052.
 Phialophora gregata stem rot, plant breeding, Glycine max cultivars 5040.
 Phialophora gregata stem rot, plant breeding, Glycine max 9457.
 phytoalexins, Avena sativa, crown rust, Puccinia coronata f.sp. avenae 1353.
 Phytoalexin americana, relationship proteins antiviral activity, reviews 9478.
 Phytophthora blight, Phoma medicaginis var. pinodella, screening 7753.
 Phytophthora cinnamomi experimental infection, Chamaecyparis lawsoniana 472.
 Phytophthora drechsleri f.sp. cajani, plant breeding, Cajanus cajan 5038.
 Phytophthora drechsleri, seedlings, Cucurbitaceae 1364.
 Phytophthora megasperma, natural selection, Glycine max 330.
 Phytophthora megasperma f.sp. glycinea, infection, Glycine max, phenotype mixing 2252.
 Phytophthora megasperma f.sp. glycinea, infection, Glycine max, Rps6 gene, role 2252.
 phytoalexins, plants, India, reviews 1369.
 Picea abies, fungi wound infection 4176.
 Pinus, Gemmelliana abietina infection 3175.
 Pinus radiata, Dipodipina pinea infection, genetic analysis 3169.
 Pisum sativum cultivars, downy mildew, Peronospora viciae, sporulation 3141.
 Pisum sativum, footrot, Phoma medicaginis var. pinodella, screening 7753.
 Pisum sativum, Mycosphaerella pinellae infection, Ascochyta fabae effects on 480.
 Pisum sativum, wilt, Fusarium oxysporum f.sp. pisi, electrophoresis 4065.
 plant breeding, Phaseolus aureus, mungbean yellow mosaic virus 446.
 plant breeding, rust, Antirrhinum 3140.
 plant diseases, epidemiology, host-pathogen interactions, genetic factors, books 9998.

Disease resistance, (continued)

plant diseases, plant breeding, genetic analysis, conferences 7278.
 plant diseases, plant breeding, reviews 2971.
 Plasmiodium brassicae, evolution, *Brassica oleracea* var. botrytis 6861.
 potato virus M, gene Gm, hybrids, *Solanum gourlayi* × *Solanum tuberosum* 2247.
 potato virus X, genes, *Solanum tuberosum* 3119.
 potato virus X, *Nicotiana tabacum* 2271.
 powdery mildew, *Erysiphe graminis*, calcium nitrate, potassium phosphate, effects on, *Triticum aestivum*, *Hordeum vulgare* 378.
 powdery mildew, *Erysiphe polygoni*, genetic analysis, *Beta vulgaris* 4096.
 powdery mildew, *Hordeum* 482.
 powdery mildew, plant breeding, *Zinnia elegans* × *Zinnia angustifolia*
 interspecific hybridization 7729.
 Prunus persica, *Leptosoma cincta* infection 3963.
 Pseudomonas glycinea, agglutinins, leaves, *Glycine* max 3128.
 Pseudomonas lachrymans, *Colletotrichum lagenarium*, induction, *Cucumis sativus* 3124.
 Pseudomonas lachrymans, inheritance, *Cucumis sativus* 6851.
 Pseudomonas syringae pv. tomato, speck, *Lycopersicon esculentum* 5049.
 Pseudomonas syringae pv. tomato, speck, plant breeding, *Lycopersicon esculentum* 5842.
 Pseudomonas tomatos speck, inheritance, *Lycopersicon* 5036.
 Puccinia arachidis rust, *Cercosporidium personatum* leafspot, cultivars screening, *Arachis hypogaea* 9475.
 Puccinia graminis f.sp. tritici, stem rust, role proteins metabolism, *Triticum aestivum* 4075.
 Puccinia helianthi, rust, germplasm screening, *Helianthus annuus* 4064.
 Puccinia hordei leaf rust, association colonies abortion, *Hordeum vulgare* 4057.
 Puccinia triticea, rust, inheritance, *Triticum aestivum* 2255.
 Pyrenophora broma, *Bromus inermis*, screening, leafspot 9458.
 Pythium myriophyllum, germplasm, *Arachis hypogaea* 9474.
 Raphanus sativus, scab, *Streptomyces scabies* 2268.
 relationship, yield, economic importance, tobacco mosaic virus infection, *Nicotiana tabacum* 9395.
 Ribis nigrum, powdery mildew, *Sphaerotheca mors-uae* 7748.
 rice cellulase hydrolysis, lignin formation, *Avena sativa* 5053.
 root rot, genetic analysis, *Canca papaya* 1343.
 root rot, *Pythophthora megasperma* f.sp. medicaginis, *Medicago sativa* 3913.
 rot, *Erwinia chrysanthemi*, *Solanum tuberosum* subsp. andigena 3132.
 Rubus idaeus, *Botrytis cinerea* infection 466.
 rust, *Arachis* 4082.
 rust, *Cronartium quercuum* f.sp. fusiforme, *Pinus taeda* 5805.
 rust, *Dactylis glomerata*, screening, phenotypes, genotypes 6856.
 rust, *Puccinia hordei*, *Hordeum vulgare*, Pa gene 1349.
 Saccharum officinarum, smut 2258.
 Saccharum officinarum, smut, *Ustilago scitaminea* 470.
 scald, *Rhynchospora secalis*, *Hordeum vulgare*, genetic analysis 451.
 Sclerotinia minor, blight, plant breeding, *Arachis hypogaea* 1342.
 Sclerotium oryzae, plant breeding, *Oryza sativa* 7743.
 screening, *Phoma medicaginis* var. pinodella infection, *Pisum sativum* subsp. arvense 478.
 Septoria nodorum, seasonal variation, *Triticum aestivum* 6781.
 Septoria tritici infection, *Triticum* 8620.
 smut, *Saccharum*, heritability, diseases grades comparison yield 6859.
Solanum melongena cultivars comparison, *Verticillium dahliae* wilt 6853.
Solanum phureja, *Pseudomonas solanacearum* infection, temperature effects on 434.
Solanum, *Pseudomonas solanacearum* infection 2269.
Solanum tuberosum, adaptability, *Pythophthora infestans*, late blight 8621.
Solanum tuberosum, hypersensitive response, role, *Pythophthora infestans* 3144.
Solanum tuberosum, infection, *Fusarium sulphureum*, *Phoma exigua* var. foveata 5810.
Solanum tuberosum, post-harvest decay, *Erwinia chrysanthemi*, storage effects on 7721.
Solanum tuberosum, *Pseudomonas solanacearum* infection, factors affecting 3107.
 soybean mosaic virus, inheritance, *Phaseolus vulgaris* 6855.
 soybean mosaic virus, strains, *Glycine* max 6839.
Sphaerotheca, plant breeding, *Ribes nigrum*, × *Ribes rubrum* 1345.
 stem rust, genetic analysis, *Triticum aestivum* 1348.
 stem rust, plant breeding, *Triticum aestivum* 447.
 stem rust, *Puccinia graminis* f.sp. tritici, *Triticum aestivum*, genetic analysis 453.
 stem rust, *Triticum aestivum*, genetic control 7731.
 stem rust, *Triticum aestivum*, Hungary 7735.
 stem rust, *Triticum turgidum*, genetic control 7728.
Sternothaphrum secundatum, *Panicum* mosaic virus infection 3117.
Sternothaphrum secundatum, *Sclerophthora macrospora* infection 9470.
 stimulation, models, tobacco mosaic virus, *Nicotiana tabacum* 8617.
 stripe rust, *Puccinia striiformis*, *Triticum*, genetic analysis 1344.
Teliafina occidentalis, mosaic disease 5042.
Thielaviopsis basicola, black pod, plant breeding, *Arachis hypogaea* 9465.
 tobacco etch virus infection, screening *Nicotiana tabacum* 1392.
 tobacco mosaic virus, callus deposition, role boron, *Nicotiana tabacum*, *Phaseolus vulgaris* 1377.
 tobacco mosaic virus, *Capsicum annuum* 3109.
 tobacco mosaic virus, hypersensitive response, *Nicotiana tabacum* 3110.
 tobacco mosaic virus, inheritance, plant breeding, *Nicotiana tabacum* 3115.
 tobacco mosaic virus, potato virus X, role peroxidase, *Nicotiana tabacum* 2162.
 tobacco mosaic virus, proteins, *Phaseolus vulgaris* 8608.
 tobacco necrosis virus, protein composition, leaves, *Cucumis sativus*, *Vigna sinensis* 9460.
Tolyposporium penicillariae smut, *Pennisetum americanum*, field trials screening 9455.
 tomato bushy stunt virus, leaves, *Gomphrena globosa* 1378.
Trifolium pratense, *Sclerotinia trifoliorum* rot rot 2251.
Trifolium pratense, *Trifolium repens*, white clover mosaic virus 331.
Triticum aestivum, *Cephalosporium gramineum*, genetic variance 7747.
Triticum aestivum cultivars, plant breeding, leaf rust, *Puccinia recondita* f.sp. tritici 1338.
Triticum aestivum, genes, powdery mildew, *Erysiphe graminis* 2258.
Triticum aestivum, genetic factors, rust, *Puccinia graminis* f.sp. tritici 3125.
Triticum aestivum, glume blotch, plant breeding 3123.
Triticum aestivum, leaf rust, genetic control, computer applications, USA, North Dakota 7730.
Triticum aestivum, loose smut, *Ustilago tritici* 8624.
Triticum aestivum, plant breeding, height, leaf blotch, *Septoria tritici* 454.
Triticum aestivum, plant breeding, stem rust, *Puccinia graminis* f.sp. tritici 8603.

Disease resistance, (continued)

Triticum aestivum, powdery mildew, *Erysiphe graminis* f.sp. tritici 2263.
Triticum aestivum, screening, *Erysiphe graminis* f.sp. tritici infection 1347.
Triticum aestivum, seedling blight, *Fusarium graminearum* 4072.
Triticum aestivum, *Septoria nodorum* infection, genetic analysis 4058.
Triticum stem rust, measuring techniques, DNA hybridization 449.
 use, prediction, late blight, *Pythophthora infestans*, *Solanum tuberosum* 8622.
Ustilago loose smut, genetic analysis, *Triticum aestivum* 7744.
Ustilago solanaceae smut, markers, glycosides, buds, *Saccharum officinale* 9359.
 vegetable marrow mosaic virus, germplasm, *Cucurbita* pepo 3116.
Verticillium dahliae, bioassays, detection, *Solanum tuberosum*, tissues 9083.
Verticillium dahliae wilt, plant breeding, seedlings, *Lycopersicon esculentum* 5045.
Verticillium wilt, *Medicago sativa* plant breeding 7669.
Vigna mungo, mung bean yellow mosaic virus infection, genetic analysis 3137.
Vigna radiata, yellow mosaic virus 5806.
Vigna unguiculata, cowpea aphid-borne mosaic virus infection 3139.
Vigna unguiculata, *Xanthomonas campestris* pv. *nicotiana* infection 9471.
 viruses, chemicals, induction, plants, reviews 7751.
Vitis vinifera, *Cucumis sativus*, *Triticum*, powdery mildew, cultural conditions 2250.
Vitis vinifera, tomato ringspot virus infection 5054.
 white mold, *Sclerotinia sclerotiorum*, plant breeding, *Phaseolus* 1365.
 wilt, *Fusarium oxysporum* infection, screening, *Glycine* max 1372.
 wilt, *Medicago sativa*, inheritance 6862.
 wilt, *Pseudomonas solanacearum*, *Solanum tuberosum*, biological control 5833.
Xanthomonas beticola leafspot, *Piper betle* 4023.
Xanthomonas oryzae leaf blight, *Oryza sativa*, germplasm analysis 5811.
 yellows, etiology, raspberry bushy dwarf virus, *Rubus* 464.
 Zea mays, *Cochliobolus carbonum* infection, inheritance 455.
 Zea mays, *Diplodia maydis*, stalk rot, *Ostrinia nubilalis* infestation effects on 361.
 Zea mays, *Helminthosporium maydis*, mitochondria proteins electrophoresis 8616.
 Zea mays, Ht gene, virulence, late blight, *Exserohilum tritici* 1370.
 Zea mays, infection, *Bipolaris maydis*, *Colletotrichum graminicola*, comparison 4069.
 Zea mays, maize dwarf mosaic virus infection, Hungary 7745.
 Zea mays, maize dwarf mosaic virus infection, inheritance 6841.
 Zea mays, *Peronosclerospora sorghi* infection, pathogenesis association 4085.
 Zea mays, plant breeding, maize dwarf mosaic virus 8604.
 Zea mays, seedlings, ear rot, blight, *Fusarium graminearum* 1361.
Diseases spread
 blue mold, *Peronospora tabacina*, spores release, wind, *Nicotiana tabacum* 4995.
Ceratocystis wagenieri infection, *Pinus ponderosa* 1451.
Drechlera graminea, leaf stripe, temperature, seed treatments, effects on, *Hordeum vulgare* 1425.
Glomerella cingulata, ascospores, epidemiology, *Malus domestica* 8570.
Trichosiphon minor, blight, man, excretion, herpes labialis, surfaces viability 3491.
 late blight, *Pythophthora infestans*, *Solanum tuberosum*, mathematical models 9381.
Lophodermella arcuata infection, *Pinus lambertiana*, effects on growth 1461.
Phellinus weirii, root rot, *Pseudotsuga menziesii* 5072.
Pythophthora infestans, *Solanum tuberosum*, field trials, mathematical models 6593.
 plant diseases, crops, models 366.
 plant diseases, mathematical models 9382.
 plant diseases, viruses, agricultural practices, reviews 2978.
 potato virus S infection, *Solanum tuberosum* 2158.
 potato virus Y infection, *Solanum tuberosum*, control, use, minerals oils sprays 1243.
Pseudomonas persicae, *Prunus persica*, orchards 4972.
Pseudomonas syringae pv. *lachrymans*, rhizosphere, roots, *Cucumis sativus* 4997.
Pseudomonas syringae pv. *tomato*, speck, environmental factors, *Lycopersicon esculentum* 1297.
Quercus wilt, epidemiology 1462.
Rhizoctonia solani infection, *Solanum tuberosum*, factors affecting 6789.
 rust, *Gramineae*, monitoring, weather satellites 1166.
 scab, *Carya illinoensis*, *Fusicladium effusum* infection, factors affecting 1202.
 shigellosis, hand washing effects on, man, Bangladesh 5356.
 tissues, plant diseases, mathematical models 1117.
 tomato yellow leaf curl virus, cultivation techniques, *Lycopersicon esculentum* 1236.
 varcella, man, nosocomial environments, airborne microorganisms 3490.
 viruses, callus, *Chrysanthemum*, *Lycopersicon esculentum* 5793.
Diseases tolerance
 barley yellow dwarf virus, *Triticum aestivum* 365.
 genetic relationship, disease resistance, *Capsicum annuum* × *Capsicum chinense*, pepper mottle virus 4093.
Pythophthora root rot, *Glycine* max, plant breeding, USA, Ohio 7658.
Diseases transmission
 Aphididae, potato virus S strains, isolation, North America, *Chenopodium quinoa* 8629.
 Aphididae, *Solanum tuberosum*, potato virus Y, potato virus X, potato virus S, potato leaf roll virus, USA 6814.
 Aphididae, viruses, plant diseases 1122.
 arabis mosaic virus, *Xiphinema diversicaudatum*, disease control, fumigation, *Lilium tigrinum* 88.
 bacteria, blight, Pierce's disease, *Oncometopis nigricans*, Citrus 1204.
 banana mosaic virus, *Aphis gossypii*, *Musa sapientum* 3069.
 barley stripe mosaic virus, *Avena fatua*, *Hordeum* 3002.
 barley yellow dwarf virus infection, *Hordeum vulgare*, *Avena sativa*, effects on, *Strobilan avenae*, *Rhopalosiphum padi* 8553.
 barley yellow dwarf virus infection, *Hordeum vulgare*, vectors 3003.
 barley yellow dwarf virus, role, *Schizaphis graminum*, *Rhopalosiphum padi*, USA, Missouri 1164.
 barley yellow mosaic virus, *Hordeum vulgare* 5729.
 bean yellow mosaic virus infection, *Vicia faba* 1128.
 beet mild yellowing virus, potato virus Y, beet yellows virus, vectors, *Myzus persicae*, disease control, deltamethrin, *Beta vulgaris* 467.
 beet yellows virus, potato virus Y, alarm pheromone derivatives effects on, *Myzus persicae* 3108.
 Bemisia tabaci, mung bean yellow mosaic virus, Thailand 6813.
 bunchy top, viruses, *Pantonia nigronervosa*, *Musa paradisica* 7677.
 canker, *Endothia parasitica*, *Castanea dentata*, role, *Acarina*, USA, Virginia, USA, West Virginia 6925.
 cassava common mosaic virus, *Manihot esculenta* 1232.
 charcoal rot, *Cylindroclathrus adspersus* role, *Helianthus annuus* 9444.

Disease transmission, (continued)

cucumber mosaic virus, Aphididae, *Phaseolus vulgaris* 7654.
Deitoecephalus flavicosta, *Mycoplasma*-like organisms, phylody, *Catharanthus roseus* 7694.
 diarrhea, role, *Escherichia coli* food contamination, children, Bangladesh 4847
Fusarium udum wilt, *Isopora*, *Calanus* cajan 2987.
 greening, *Cuscuta* role, *Citrus sinensis*, *Vinca rosea* 9448.
 maize dwarf mosaic virus, plant viruses vectors, *Schizaphis graminum*, Gramineae 5704.
 maize white line mosaic virus infection, plants, USA, Ohio 1200.
 Mollicutes, X disease, *Collodon montanus*, *Prunus* 4973.
mycoplasma-like organisms, *Euscelis obsoletus*, *Macrosteles sexnotatus*, plant diseases 3399.
mycoplasma-like organisms stunt, *Allygus mayri* vectors, *Rubus* 2169.
Nilaparvata agents, grassy stunt virus, *Oryza sativa* 4952.
 Norwalk agent infection, man, association swimming, epidemiology 1710.
Orosius lophophorum *ryukyuensis*, *mycoplasma*-like organisms, witches' broom, (*pomoea batatas*, *Solomon*) 1 9424.
 pea enation mosaic virus, bean yellow mosaic virus, *Myzus persicae*, *Acyrtosiphon pisum*, *Pisum sativum* 2101.
 peanut clump virus, *Arachis hypogaea* 6736.
 Phytophthora cinnamomi dieback, *Eucalyptus marginata*, pathogenesis 9523.
 plants, viruses, *Nematoda*, association feeding behavior 1121.
 potato leaf roll virus, *Myzus persicae*, leaves age, *Solanum tuberosum* 2192.
 potato leaf roll virus, *Myzus persicae*, storage conditions, potatoes 7720.
 rhinovirus, household products, surfaces, man 804.
 rice gall dwarf virus, *Nephotettix dorsalis*, *Oryza sativa* 4987.
 rice gall dwarf virus, *Recilia dorsalis*, *Nephotettix nigropictus*, *Oryza sativa* 1162.
 rice tungro virus, *Nephotettix virescens* vectors, *Oryza sativa* 360.
 role, milk, reviews 211.
 southern bean mosaic virus, *Epilachna varivestis*, *Ceratomyza trifurcata*, feeding, reargrivation, *Phaseolus vulgaris* 6738.
 Spiroplasma citri, host plants, feeding, *Circulifer tenellus*, vectors 4920.
 Spiroplasma citri, *Macrosteles fascifrons* 6803.
 streak virus infection, plants 1126.
 tomato bushy stunt virus, vectors, man, *Lycopersicon esculentum* 1308.
 tomato ringspot virus, *Xiphinema rivesi*, *Xiphinema americanum*, orchards 2142.
 Trialeurodes vaporariorum, beet yellows virus infection, *Cichorium endivia*, *Lactuca sativa*, *Cucumis sativus* 9431.
 urdbean leaf crinkle virus infection, *Vigna radiata*, benomyl effects on 3152.
 vectors, *Bemisia tabaci*, soybean crinkle leaf virus infection, *Glycine* max 5672.
 vectors, pea enation mosaic virus, *Lathyrus odoratus*, *Acyrtosiphon pisum* 342.
 vectors, research programs, biological control, *Insecta* 1029.
Vigna unguiculata, vectors, cowpea banding mosaic virus, cowpea necrosis virus, cowpea chlorotic spot virus 5673.
 virus-like particles, *Bemisia tabaci*, sida alba, *Gossypium hirsutum* 2199.
 viruses, *mycoplasma*-like organisms, citrus 3970.
 Vitis, grapevine yellow speckle disease 3670.
 watermelon mosaic virus, vectors, Aphididae 4966.
 yellows, *mycoplasma*-like organisms, vectors, *Deitoecephalus flavicosta*, *Cocos* 1210.

Diseases,
 forest trees, *Cylindrocylindium scoparium*, Malaysia 2316.
 Gossypium seedlings, bacteria, fungi, disease control 2225.
 identification, *Glycine* max, computer applications, USA, Illinois 4942.
 Lupinus, fungi, viruses, association, crop rotation 4985.
 plants, fungi, new records, New Zealand 3899.
 Vitis vinifera, fungi, characterization 5026.

Dishwashers,
 water temperature, chlorine disinfection 4458.
 water temperature, hygiene, disinfection 4455.

Disinfectants,
 aerosols, airborne microorganisms 5346.
 aerosols, sanitation, nosocomial environments 806.
 antibacterial activity, *Campylobacter fetus* subsp. jejuni 5169.
 antibacterial activity, hospitals, 4459.
 antibacterial activity, *Klebsiella ozaenae* 2434.
 antifungal activity, *Ascosphaera apis*, *Aspergillus flavus* 4304.
 antimicrobial activity 704.
 antiviral activity, efficacy, gel filtration methodology 9694.
 glutaraldehydes based, evaluation, dialysis systems, antibacterial activity, *Mycobacterium* 7207.
 optimum concentrations, antimicrobial activity 2498.
 organic matter, effects on, antimicrobial activity 7117.
 orthophenylphenol, paraformaldehyde, calcium oxide, antibacterial activity, coliforms 8982.
 test dips, udder hygiene, in vitro susceptibility, *Staphylococcus aureus* 6038.

Disinfection,
 apparatus, copper pipelines, bacteria growth 5344.
 bacteria, antiseptics, hospitals 5347.
 bacteria, antiseptics, hospitals, man 5348.
 bacteria, environmental hygiene 5349.
 bacteria, food processing 4842.
 bottles, bottle feeding, bacteria, infants, man 800.
 chickens feeds, γ radiation effects on 8492.
 chlorine, chlorine dioxide, iodine, bromine chloride, poliovirus 2468.
 chlorine, dishwashers, water temperature 4458.
 dentistry equipment, bacteria, use, water sprays 5335.
 Darmacenter marginatus, tissues fixation, methodology, diagnosis, tularemia 1774.
 diapers, chemicals 801.
 drinking water, hepatitis A virus, indicator species, inactivation, chlorine, pH effects on 9812.
 drinking water, *Mycobacterium*, ionizing radiation 3487.
 glutaraldehyde, endoscopes 5338.
 hand, dentistry, man 8988.
 hand, germicides, man 816.
 heat, microorganisms, models 4461.
 hospitals, germicides 9821.
 hygiene, water temperature, dishwashers 4455.
 ionizing radiation, drinking water, *Mycobacterium* 2500.
 man, hospitals, association, nosocomial infection 3508.
 microorganisms, wastewater treatment, ozonation 5324.
 ozone, laboratornes effluents 8984.
 ozone, waste water 5293.
 ozone, waste water 5297.

Disinfection, (continued)

pathogens, sewage sludge 8936.
 pathogens, sewage sludge, conferences 9096.
 phase Φ X174, indicators, methodology 7964.
 radiation, feeds, microorganisms distribution 7605.
 sewage sludge, γ radiation, pathogens reduction 8935.
 sewage sludge, electrons, radiation 8927.
 skin, antimicrobial agents, man, books 6359.
 skin, topical application antimicrobial agents, man, reviews 6278.
 sludge, pathogens, wastewater treatment 9405.
 soil, association, vegetables contamination, bacteria 3253.
 spoilage bacteria, industrial water systems, breweries 5321.
 standardization, bacteria 6085.
 U.V. radiation, *Bacillus subtilis* contamination waste water 3472.
 veterinary medicine, sterilization 6274.
 waste water, microbiology, methodology, bibliographies 1698.
 wastewater treatment 8926.
 water, bacteria contamination, cleaning systems, milking machines 5342.

Dispersal,
 Emex australis, *Uromyces rumicis* infection effects on 425.
 viruses, pest control, *Arthropoda* 989.

Disposal,
 sludges, treatment, bibliographies 1697.

Dissemination,
 pathogens, biological control, pest control, *Insecta* 994.

Dissolved organic carbon,
 effects on carbon dioxide gas production, soil, Japan 8668.

Dissolved oxygen,
 effects on continuous culture reactors, nitrifying bacteria, wastewater treatment 1705.
 effects on, sulfur dioxide formation, *Saccharomyces uvarum*, fermentation, wort 7518.
 mathematical models, microbial pollution, coastal waters, estuaries 9813.
 psychrotrophic bacteria, growth, milk, cold storage 239.
 role steel corrosion, heterotrophic bacteria, sea water 9626.
 transfer, lignin biodegradation, *Phanerochaete chrysosporium* 5588.

Distichis spicata,
 vesicular-arbuscular mycorrhizas effects on, association salinity 5098.

Distilled water,
 antibacterial activity, chlorine residual effects, *Escherichia coli* 2462.

Dittelleries,
 industrial effluents, *Candida tropicalis*, growth conditions 9231.
 industrial effluents, single-cell protein production, *Candida utilis*, chemical composition, amino acid composition 9118.
Malus pumila, *Aspergillus niger*, wastewater treatment 8054.
 whiskey, wastes, fungi mixed culture, protein biosynthesis 15.

Diauxioid reductase,
Bacillus megaterium spores, isolation, purification, characterization 1878.

Disulfoton,
 effects on, rhizosphere microorganisms, *Rhizoctonia solani*, *Verticillium albo-atrum*, wilt, *Solanum tuberosum* 1512.
 soil microorganisms respiration, effect on 5974.

Ditalimfos,
 antifungal activity, tolerance, *Amelomyces quisqualis* 1401.

Diterpene lactones,
Spongia officinalis, antibacterial activity 8769.

Diterpenoids,
Stochospermum marginatum, antibacterial activity, *Staphylococcus aureus* 3315.

Dithiobis (succinidyl propionate),
 cross-linking citrate (si)-synthase, effects on allosteric properties, *Acinetobacter calcoaceticus* 4676.

Dithiobispropionimide,
 cross-linking, cytochrome c binding sites, reaction centers, *Rhodospseudomonas* 3651.

Dithiocarbamates,
 synthesis, antifungal activity 3153.

Diftrisarubicina,
 physicochemical properties, antimicrobial activity 9778.

Dityrosine,
 detection, cell surface, *Staphylococcus aureus* 1834.

Diurnal variations,
 acinar rhizoids, nitrogen fixation, nodules, *Ceanothus velutinus* 9513.
 respiration, soil properties, tropical environment, forests, pasture 1493.
 Trifolium repens, nitrogen fixation, acetylene reduction 609.

DL-L- amino- ϵ -caproic acid,
 use, lysine production, *Cryptococcus*, *Pseudomonas* 6395.

DNA,
 4 acetoxy-1,4-benzoxazin-3-one interaction, role antifungal activity, mutagenesis 4309.
 adenovirus, preparation methodology, infected cells 9017.
 analysis, *Agrobacterium tumefaciens* Ti plasmid, *Nicotiana tabacum* crown gall 7690.
 antibiotics complex, C.D. 7971.
 base composition, electrophoresis, bacteria 7254.
 binding, bacitracin, physicochemical properties 7157.
 binding, oligomycin, fluorescent probes 8013.
 binding, phase Φ X174, association, anthracylcline antibiotics inactivation 1582.
 closed circular, association nitrofurant resistance, *Fusarium oxysporum* 656.
 closed metabolic production, fungi, *Streptomyces*, detection, use *Bacillus subtilis*, rec gene, fungi 7246.
 dependent adenosinetriphosphatase, purification, characterization, *Bacillus cereus* 8264.
Escherichia coli, flow cytometry, methodology, clinical microbiology 6339.
 fragments, *Bacteroides fragilis* subsp. thetaetaoamiron, cloning, plasmids, association, identification 4487.
 fragments ligation, polydeoxyribonucleotide synthetase (ATP), immobilized enzymes, phase T4 2755.
 fragments replication, *Streptomyces* antibiotic, association oleandomycin biosynthesis 8006.
 geminiviruses, clones, nucleotide sequence role, *Nicotiana benthamiana* infectivity 9370.
 homology, *Rhizobium*, *Galega* infection, taxonomic significance 8696.

- NA, (continued)**
hybridization, measuring techniques, Triticum stem rust disease resistance 449.
hybridization methodology, Yersinia enterocolitica detection, enumeration, food contamination 9049.
- Incorporation, vaccinia virus, 6-thioguanine effects on 9691.**
- Mycoplasmales** viruses-laidlawi, replicative intermediates biosynthesis, chloramphenicol effects on 1625.
- Neurospora crassa, isolation, methodology 4511.**
- organization, Nicotiana tabacum, Agrobacterium tumefaciens crown gall 2202.**
- phages, antiviral activity, 7-N-(p-hydroxyphenyl)mytomycin C 1581.**
- physicochemical properties, Escherichia coli, association, dnacm B1 bactericidal activity 775**
- plasmids, isolation, characterization, electron microscopy, Escherichia coli 6340**
- plasmids, isolation methodology, Escherichia coli 9875.**
- plasmids, isolation, Streptococcus lactic acid bacteria 9047.**
- single-stranded, plant viruses, plant diseases 4923.**
- Staphylococcus aureus, isolation, methodology 8121.**
- Streptomyces kasugaensis, cloning methodology 6313.**
- superhelical, endodeoxyribonuclease cleavage, Escherichia coli 4691.**
- TI plasmid, detection methodology, Agrobacterium tumefaciens 9980.**
- viruses, hybridization analysis, RNA, detection, plant cells 6299.**
- viruses, separation techniques 1739.**
- NA biosynthesis,**
association, dioxidine antibacterial activity mechanisms 1557.
cytomegalovirus, antiviral agents activity, measurement, nucleic acids hybridization analysis 8798.
cytomegalovirus (human), antiviral activity,
9-(1,3-dihydroxy-2-propoxymethyl)guanine, cell culture 9689.
Escherichia coli, Bacillus subtilis, parabens, effects on 7120.
Escherichia coli, diauxic growth 8215.
herpes simplex virus, Phytolacca americana proteins inhibition 3368.
herpes simplex virus, 9-(2-hydroxyethoxymethyl)guanine inhibition, cell culture 8795.
Lachnella villosa, Peniophora laeta, marasmic acid, effects on 6083.
phage Φ X174, inhibition, acalcomycin A role 9775.
Pseudomonas pisi infection, Nicotiana tabacum, hypersensitive response, effects on 4980.
Streptococcus mutans, Streptococcus sanguis, antibacterial activity, cefoxitin, mecillinam 7135.
sulfochloranthine effects on, Escherichia coli 2456.
- NA gyrase,**
purification, characterization, Pseudomonas aeruginosa 2753.
- NA polymerase I,**
genes, mutation, 9-(2-hydroxyethoxymethyl)guanine drug resistance, herpes simplex virus 7874.
purification, characterization, Thermus ruber 6471.
- NA polymerase I,**
genetic engineering, purification, Escherichia coli 7424.
structure, electron microscopy, Escherichia coli 6535.
- NA polymerase (RNA-dependent),**
avian myeloblastosis virus, inhibition, retostatrin antiviral activity 9794.
- NA-binding protein,**
Escherichia coli, purification, dnaA gene 1844.
Haemophilus influenzae, purification, characterization 7283.
purification, characterization, cell membranes, Bacillus subtilis 9121.
purification, characterization, vaccinia virus, cowpox virus 7285.
- nacin B1,**
bacterial activity, association, DNA physicochemical properties, Escherichia coli 775.
- NA(guanosine-6)-methyltransferase,**
Escherichia coli, measuring techniques 868.
- Dodecane,**
precursors, dodecanedioic acid biosynthesis, Candida tropicalis 14.
- dodecanedioic acid,**
biosynthesis, n-dodecane precursors, Candida tropicalis 14.
- w-Dodecanedioic acid,**
production, Candida tropicalis, immobilized cells 1840.
- dodecanol acid,**
repellents, Myzus persicae, vectors, viruses, plant diseases 459.
- odecyl gallate,**
antibacterial activity 7084.
- odecyltriethoxy sulfate,**
biodegradation, Pseudomonas 148.
- odine,**
fungi cross-resistance, association fenarimol resistance 7022.
media (selective), Beauveria bassiana, Metarhizium 3631.
resistance, Venturia, measuring techniques 7886.
- ogs,**
antibody response, combined vaccines 3449.
immunity, immunogenicity, Bordetella bronchiseptica vaccines, preparation 785.
immunogenicity, vaccines, canine distemper virus, adenovirus (canine), parvovirus (canine), parainfluenza virus, Leptospira, bacterins 8924.
nutrient sources, microorganisms single-cell protein 3851.
parvovirus (canine) vaccines, antibody response, immunity 2599.
- olichos labial,**
seed treatments, fungicides 2290.
- ollar spot,**
Sclerotinia homoeocarpa, resistance, iprodione, benomyl, Agrostris palustris 6010.
- omestic animals,**
feeds, bacteria contamination 248.
intestinal microflora, lactic acid bacteria feeds effects on 3850.
mycotoxicosis, mycotoxins, feeds contamination 9292.
Salmonella isolation 3461.
toxicity, Escherichia coli toxins, gene transfer, phages conjugation 9315.
- ormancy,**
Malus pumila, Podosphaera leucotricha powdery mildew, fungicides treatment 1398.
- Dothiella aromatica,**
stem rot, Persea gratissima, disease control, prochloraz 6833.
- Dothlostoma pini,**
needle blight, Pinus radiata, monoterpenes, effects on, spore germination 4143.
- Dowco 444,**
seed treatments, effects on nitrogen fixation, disease control, Phytophthora megasperma f.sp.glycinea, Glycine max 8644.
- Downy mildew,**
Beta vulgaris 2217.
Bremia lactucae, disease resistance, genes, Lactuca sativa 3126.
Bremia lactucae, metalaxyl disease control, Lactuca sativa 5837.
Bremia lactucae, virulence assays, Lactuca sativa 3091.
Bremia lactucae, virulence, association, disease resistance, Lactuca sativa 6820.
Cucumis melo, disease resistance 1358.
disease control, seed treatments, metalaxyl, Orzya sativa 1433.
Helianthus annuus, disease control, metalaxyl 1418.
Peronosclerospora, Sclerospora graminicola, Zea mays, Sorghum vulgare, Pennisetum typhoidum, epidemiology, reviews 1186.
Peronosclerospora sorghi, disease resistance, plant breeding, Sorghum vulgare 4061.
Peronosclerospora sorghi, host range, Graminaeae 5700.
Peronosclerospora sorghi, symptoms, Zea mays 2122.
Peronospora effusa, seed-borne diseases, Spinacia oleracea 9423.
Peronospora manshurica, peroxidase activity, leaves, Glycine max 346.
Peronospora parasticta, disease resistance, Brassica napus, Brassica oleracea 4056.
Peronospora parasitica, fungicides disease control, Brassica pekinensis 8631.
Peronospora parasitica, Pseudoperonospora cubensis, Bremia lactucae, disease resistance, Cucumis sativus, Lactuca sativa, Brassica napus 8609.
Peronospora trifoliorum, Medicago sativa, USA, Wyoming 9330.
Peronospora vitiae, penetration, disease resistance, Pisum sativum 3142.
Peronospora vitiae, sporulation, disease resistance, Pisum sativum cultivars 3141.
Plasmopara halstedii, disease resistance, Helianthus annuus 4066.
Plasmopara halstedii, effects on, metabolism, Helianthus annuus 3987.
Plasmopara halstedii, Erysiphe cichoracearum, Sphaerotheca fuliginea, Helianthus annuus 4006.
Plasmopara halstedii, stimulation, phenylalanine ammonia-lyase kinetics, Helianthus annuus 9405.
Plasmopara viticola, fungicides resistance, measuring techniques, in vitro, Vitis vinifera 7890.
Plasmopara viticola, growth, tissue culture, Vitis vinifera 1289.
Pseudoperonospora cubensis, Luffa acutangula, pollen, effects on, spore germination 5011.
Pseudoperonospora humuli, epidemiology, weather, Humulus lupulus 3087.
Pseudoperonospora humuli, fungicides, disease control, Humulus lupulus 1403.
Sclerospora graminicola, pathogenicity, genotype-environment interactions, cultivars, Pennisetum americanum 6755.
Sclerospora graminicola, pathogenicity, statistical analysis, Pennisetum americanum 7566.
Sclerospora graminicola, Pennisetum americanum, disease control, metalaxyl seed treatments 9502.
Sclerospora graminicola, Pennisetum americanum, fungicides disease control 4116.
Sclerospora graminicola, Pennisetum typhoides, germplasm disease resistance, productivity 473.
Sclerospora graminicola, susceptibility, plant breeding, cytoplasmic male sterility, Pennisetum americanum 5607.
Sclerospora sorghi, population ecology, limiting factors, Zea mays 5698.
Zea mays, resistance, germplasm, population genetics 8626.
Zea mays, Sclerospora sorghi infection, Somalia 381.
- Doxylicin,**
Yersinia pestis antibiotic sensitivity testing 6110.
- Doxycycline,**
comparison, thiacycline, antibacterial activity 1637.
sensitivity, Rickettsia rickettsii 1638.
- Dracaena marginata,**
Fusarium moniliforme infection, insecticides soaps, foliar applications 9486.
leafspot, irrigation effects on pathogenesis 1274.
- Drainage,**
mines, effects on, bacteria, community structure, lakes 8068.
- Drainage systems,**
coal, waste water, bacteria, sodium lauryl sulfate, sodium benzoate, inhibition 8713.
- Drechlera,**
 α -amylase, hemicellulase, production 6404.
chemicals, antifungal activity 3336.
infection, Lolium perenne, Lolium multiflorum, incidence, British Isles 5721.
leafspot, Lolium, pathology 6768.
- Drechlera cactoria,**
stem rot, Rhopalodopsis gaertneri 1261.
- Drechlera gligantea,**
eye spot, Zizania aquatica 1170.
- Drechlera graminea,**
antifungal activity, triadimenol diastereoisomers 693.
infection, ethylene production, wounds 1183.
leaf stripe, temperature effects on disease spread, Hordeum vulgare 1425.
- Drechlera halodes,**
germination, Phaseolus mungo 3924.
- Drechlera maydis,**
leaf blight, Zea mays, factors affecting epidemiology 6772.
leaf blight, Zea mays, germplasm, incidence 2131.
leaf blight, Zea mays, Tanzania 7673.
- Drechlera oryzae,**
antifungal activity, coumarins 8635.
brown spot, fungicides, treatment, Zizania aquatica 2272.
infection, Orzya sativa, phytoalexins inducers use seed treatments, induction, hypersensitive response, disease resistance 2292.
- Drechlera rostrata,**
spoilage, Artocarpus lakoocha fruits 2238.
- Drechlera setariae,**
leafspot, Calathia, Maranta 9426.
- Drechlera sorghicola,**
leafspot, Sorghum, etiology, pathogenicity 9354.
- Drechlera sorokiniana,**
brown spot, fungicides, treatment, Zizania aquatica 2272.
infection, Gramineae, glucose effects on 3938.

Subject Index

Drechslera sorokiniana, (continued)

- leafspot, *Poa pratensis* leaves senescence, herbicides effects on pathogenesis 5387
 - pathogenesis, *Poa pratensis* sugars, amino acids, herbicides effects on 5718
- ### Drechslera teres,
- leafspot, *Hordeum vulgare* 1173
 - pathogenicity, *Hordeum vulgare* 1181

Drechslera turcica,

- leaf blight, *Zea mays*, antifungal activity, medicinal plants extracts 7756

Drinking,

- cow's milk, association *Salmonella* dublin infection, genatics, man 5616

Drinking water,

- ammonifying bacteria, ammonium fermentation 9817
- association, bacteria indicator species 797
- bacteria contamination, Egypt, rivers 2518
- bacteria isolates, chlorine resistance 633
- bacteria levels, environmental monitoring 1717
- bacteria water isolates, multiplication 2631
- Campylobacter fetus subsp. jejuni, waterborne diseases 6260
- chlorination, *Aeromonas sobria* isolation, biochemical characteristics 6262
- coliforms, incidence, mathematical models 3484
- coliforms, media (isolation) 3569
- coliforms, membrane filtration, enumeration efficiency 3587
- contamination, coliforms identification, characterization, tropical environment 8978
- contamination, hepatitis A outbreaks, man 6261
- contamination, hepatitis A virus, epidemiology, hepatitis A, man, USA, Pennsylvania 7202
- disinfection, hepatitis A virus, indicator species, inactivation, chlorine, pH effects on 9812
- disinfection, ionizing radiation, *Mycobacterium* 3487
- Escherichia coli, *Pseudomonas*, antibiotic resistance 3480
- incidence, Legionella 2624
- iron-oxidizing bacteria, identification, isolation 9818
- isolates, aerobic bacteria, antibiotic resistance, streptomycin 1533
- isolation, *Yersinia enterocolitica* 8945
- livestock, contamination, coliforms, fecal coliforms 8975
- man, water-borne diseases, bacteria, viruses 2633
- microbial pollution, bacteria, indicator species, conferences 5454
- microbial pollution, fecal microflora, hydrogen sulfide production detection 3478
- Mycobacterium*, disinfection, ionizing radiation 2500
- parasites contamination, Egypt, rivers 2619
- rotavirus (simian) concentration, membrane filtration, flocculation 3538
- systems, fungi 1722
- trace elements enrichment, manganese oxidation, bacteria role 9816
- viruses recovery, surface charge, filters 8096
- water analysis, reviews 2628

Drosophila,

- food sources, yeasts, rot, *Opuntia stricta* 3048

Drosophila melanogaster,

- mycotoxins pretreatment effects on aflatoxin B1 toxicity 7617

Drought,

- effects on aflatoxin B1 contamination, *Zea mays* 4887
- effects on *Cytospora kunzei* canker, *Picea pungens* 5079
- Quercus mortality, association Hypoxylon atroradicatum canker 5074
- relationship, *Tilia cordata* *Cenococcum geophilum*, symbiosis 4206

Drought tolerance,

- Allium cepa, *Glomus etunicatus* stimulation 4200
- Triticum, vesicular-arbuscular mycorrhizas effects on 4185

Drug resistance,

- amantadine, remantadine, production, influenza A virus, variants, methodology 1546
- antimicrobial agents, books 10001
- benomyl, *Venturia inaequalis*, characterization 7051
- Botrytis cinerea, methyl benzimidazol-2-yl carbamate 1527
- Botrytis squamosa, iprodione 1519
- carbadox, R factors, host range, *Escherichia coli*, animal isolates 7038
- chlorhexidine, *Serratia marcescens* 1525
- Citrobacter koseri 7903
- cotrimoxazole, association, sulfonamide susceptibility, Enterobacteriaceae 6004
- cotrimoxazole, furazolidone, *Salmonella typhimurium* clinical isolates 4282
- cotrimoxazole, *Salmonella krefeld* animal isolates, plasmids, role 3278
- cotrimoxazole, trimethoprim, bacteria, reviews 3293
- 4-diamino-6,7-diacetoxypiperidine, clinical isolates, *Vibrio cholerae* 8730
- Enterobacteriaceae, R factors analysis, association, nosocomial infection 1541
- Enterobacteriaceae, trimethoprim, gene transfer, plasmids 3298
- Erysiphe graminis powdery mildew, Triticum, *Hordeum*, treatment 2126
- Escherichia coli, animal isolates 665
- Escherichia coli, clinical isolates, British Isles 1540
- Escherichia coli, fecal microflora, isolates, man, Netherlands 7033
- Escherichia coli, intestinal microflora, juveniles, chickens 2411
- Escherichia coli, isolates, man, cattle, chickens, pigs 7039
- Escherichia coli, poultry animal isolates 1535
- Escherichia coli, *Salmonella typhimurium*, isolation, slurries, cattle animal wastes 2617
- R factors, *Pseudomonas aeruginosa* 6031
- 5-fluorouracil, role transport, *Candida utilis* 642
- fungi, contamination, vaccines, characterization 2396
- Fusarium oxysporum, nitrofurantoin resistance, association closed circular DNA 656
- fusidic acid, role, *Escherichia coli* chloramphenicol acetyltransferase 7907
- gentamicin, plasmids, conjugation, *Staphylococcus* 3273
- gram-negative bacilli, relationship hospitals 8737
- herpes simplex virus clinical isolates, reviews 9653
- hexachlorophene, *Escherichia*, *Salmonella*, *Pseudomonas*, conjugation, R factors 6030
- 9-(2-hydroxyethoxymethyl)guanine, herpes simplex virus 2 mutants 3271
- 9-(2-hydroxyethoxymethyl)guanine, herpes simplex virus, mutation, thymidine kinase, DNA polymerase, genes 7874
- 9-(2-hydroxyethoxymethyl)guanine, herpes simplex virus, reviews 9652
- induction, association, antibacterial agents treatment bacteria infection, cattle 3284
- influenza A virus, remantadine, amantadine, plaque assay 9635
- influenza, remantadine interaction lipid membranes 3266
- iprodione, *Fusarium nivale* 1530
- ketoconazole treatment, *Candida albicans* infection, man 4274

Drug resistance, (continued)

- Macrophomina phaseolina, fungicides 650
 - mechanisms, bacteria, trimethoprim, sulfonamides, cotrimoxazole 6000
 - mercury, hospitals, clinical isolates, *Escherichia coli*, *Staphylococcus aureus* 662
 - methodology, identification, *Salmonella typhi* 7255
 - 2-O-methyladenosine, vaccinia virus, mutants 8739
 - metronidazole, *Clostridium perfringens* mutants 3294
 - Mycobacterium tuberculosis*, clinical isolates, Korea Rep. 9656
 - nitrofurazone, nitrofurantoin, *Escherichia coli* isolates 3276
 - novobiocin, *Aeromonas salmonicida* subsp. salmonicida, temperature effects on 51
 - Pasteurella, animal isolates, cattle, respiratory tract diseases 7894
 - pathogens, *Mangifera indica*, fungicides 1532
 - Phytophthora megasperma, metalaxyl 1529
 - plasmids, *Vibrio anguillarum*, conjugation, *Vibrio parahaemolyticus* 6015
 - Proteus 657
 - Pseudomonas paucimobilis*, antimicrobial agents 2512
 - pyrazinamide, pyrazinamidase assays, *Mycobacterium tuberculosis* 9638
 - nbavirin, fowl plague virus mutants 630
 - Salmonella* isolates, Netherlands, incidence 5161
 - Salmonella typhimurium*, association, plasmids, Kuwait 5150
 - Salmonella typhimurium*, clinical isolates, India 2409
 - Schizosaccharomyces pombe, correlation, amino acids, uptake, adenosinetriphosphatase, activity 8748
 - Streptococcus pneumoniae* clinical isolates 3300
 - trimethoprim, clinical isolates, nosocomial environments 2399
 - trimethoprim, Enterobacteriaceae, urinary tract isolates, British Isles 6007
 - trimethoprim, gram-negative bacilli, epidemiology, genetic analysis 6001
 - trimethoprim, plasmids, *Salmonella* 4277
 - trimethoprim, *Staphylococcus epidermidis*, *Staphylococcus saprophyticus* 4279
 - trimethoprim, tetrahydrofolate dehydrogenase genes, *Escherichia coli*, Klebsiella pneumoniae 1522
 - trimethoprim, transfer, urinary tract clinical isolates, Finland 9654
 - uracanic acid, Trichophyton rubrum resistant mutant, triacylglycerol lipase, keratinase, phospholipase A, levels 7877
- ### Drug sensitivity testing,
- anaerobic bacteria, reviews 6113
 - antimicrobial agents, books 10001
 - antimicrobial agents, *Chlamydia psittaci* 7087
 - antimicrobial agents efficacy, drug sensitivity testing, use, fungi, bacteria 9702
 - assays, herpes simplex virus 1, herpes simplex virus 2 6075
 - augmentin, gram-negative bacteria, association, media factor analysis 2697
 - bacteria, animal isolates, pigs urinary tract, chemotherapeutics 2464
 - bassaris indicator species, *Bacillus subtilis*, *Staphylococcus aureus*, *Micrococcus luteus*, *Klebsiella pneumoniae* 6039
 - Bordetella pertussis 7133
 - Brevibacterium ammonigenes, association 5'-inosinic acid production 8776
 - Campylobacter fetus subsp. jejuni 4292
 - Cunninghamella bertholletiae, clinical isolates 692
 - Cuscutaria lutea var. aena 7939
 - dapsone, *Mycobacterium* 2467
 - Eikenella corrodens, agar dilution test, comparison, broth dilution test 2445
 - Escherichia coli, chlorine dioxide, relationship, growth conditions 667
 - 5-fluorocytosine, media methodology, *Candida*, *Torulopsis* 897
 - fungi, aculeacin A 4308
 - Fusobacterium, Bacteroides 725
 - gastroenteritis bacteria isolates 2521
 - germicides, methodology, bacteria 5192
 - Haemophilus parahaemolyticus animal isolates 5189
 - herpes simplex virus typing methodology, association thymidine kinase activity 1741
 - herpes simplex virus 2, 5-thiyl-2'-deoxyuridine 5219
 - Leptospira interrogans ser. hardjo 8780
 - media, *Mycobacterium tuberculosis*, swabs culture methodology 869
 - metronidazole, bactericides 6043
 - miconazole, *Moraxella bovis* 5178
 - Mycobacterium* 679
 - Mycobacterium intracellulare*, infection, monkeys, clinical aspects 4285
 - Mycobacterium leprae*, radioactive labelling, in vitro, macrophages 9659
 - Mycobacterium leprae*, antimicrobial agents 2466
 - Mycobacterium tuberculosis*, tissue culture media 7911
 - Mycobacterium tuberculosis*, antitubercular agents 2422
 - pipemidic acid, disc-diffusion test, *Pseudomonas aeruginosa* 7916
 - Shigella, incidence, Ethiopia 2525
 - sulfonamides, agar diffusion test, *Mycobacterium* 9657
 - Treponema hyodysenteriae, dimethylsulfoxide 8768
 - urinary tract clinical isolates, bacitracin 6114
- ### Drug tolerance,
- Candida*, oral microflora, man 4271
- ### Drugs,
- antibacterial activity, measurements 722
 - antibacterial activity, role, bacteria outer membranes phospholipase 8783
 - antimicrobial activity, treatment, infectious diseases, books 1817
 - macrolide antibiotics, interaction 1681
 - microorganisms isolation 6086
 - production, microorganisms models, Mammalia metabolism, conferences 7467
 - sensitivity, gram-negative bacteria clinical isolates, osteomyelitis, man 6057

Dry bubble disease,

- Verticillium fungicola, prochloraz, disease control, Basidiomycetes 6824
- Verticillium, pathogenicity, Agaricus bisporus, Agaricus bisporus 2218

Dry matter,

- uptake analysis, bacteria biomass determination 8129

Dry rot,

- Serpula lacrimans, wood 3172

Dryandra aestivalis,

- Phytophthora cinnamomi infection, pathogenesis 4153

Drying,

- air, sludges, association, viruses infectivity 7195
- asparaginase, stability, *Candida guilliermondii* 7333
- Campylobacter fetus* subsp. jejuni survival, surfaces, sanitation 807
- ± freezing, soil, effects on soil microorganisms 579
- Sclerotium cepivorum sclerotia, association, viability, soil 6972
- spraying, bacteria survival, milk 4876

ying, (continued)

- spraying, milk, indicator species, food contamination 4875.
Streptomyces phaeochromogenes, immobilized cells, enzymes activity 9064.
- ines.**
 deserts, soil microorganisms, ecological distribution, India 1473.
 sand, arylsulphohydrolase, cysteine desulphohydrolase, thiosulphate cyanide sulphurtransferase, activity, correlation, vegetation, British Isles 6955.
- ing.**
 cattle, decomposition, rangelands 3198.
- ist.**
 corn, contamination, secalonic acid D 279.
 cottonseed, endotoxins 5663.
 endotoxins, fungi, bacteria, pigs housing 7638.
 grain, fungal flora, mycotoxins, grain elevators 7619.
- itch elm disease.**
 biological control, *Trichoderma viride*, Ulmus 6613.
 Ceratocystis ulmi, environmental impact, population changes, Aves, Ulmus 6927.
 Ceratocystis ulmi, isolation, annual rings, Ulmus americana, USA, California 2310.
 Ceratocystis ulmi, Ulmus 4145.
 Ceratocystis ulmi, Ulmus americana, defects 4152.
 Ceratocystis ulmi, Ulmus americana, phytophagous, benzimidazole derivatives 1458.
 Ceratocystis ulmi, xylem, dysfunction, Ulmus americana 8640.
 distribution, Belgium, relationship, Ulmus sensitivity, Ophiostoma ulmi 5080.
 history surveys, Belgium 5078.
- warf disease.**
 Morus, cytopathology, Mycoplasma 9375.
 Prunus, Malus, iarvirus isolates 5740.
- re-ligand chromatography.**
 glucose-6-phosphate dehydrogenase purification, Leuconostoc mesenteroides 4617.
- yes.**
 Beta vulgaris, purification, fermentation, Aspergillus niger, Saccharomyces oviformis 7470.
 Beta vulgaris, purification, use, fungi 9086.
 biodegradation, anaerobic conditions 8423.
 decolorization, Phanerochaete chrysosporium, association, lignin biodegradation 6646.
- 5-Dihydroxy-3-(p-hydroxyphenyl)-6-phenyl-1,4-benzoquinone.**
 isolation, Asocoryne sarcoides, characterization 5556.
- ar rot.**
 Fusarium graminearum, disease resistance, Zea mays 1361.
 Gibberella zeae, virulence, relationship, Zea mays, genotypes 3945.
- arly blight.**
 Alternaria solani, biological control, Streptomyces longisporus antagonism, Solanum tuberosum 4105.
 Alternaria solani, Lycopersicon esculentum 8572.
 Alternaria solani, Lycopersicon esculentum, computer applications predictions, USA 4011.
 Lycopersicon esculentum, sulfur dioxide air pollution effects on 6819.
- elactone.**
 Streptomyces, structure, esterase inhibitors 2809.
- ola virus.**
 indirect fluorescent antibody test, use β -propiolactone 3534.
 immunomucassay 3540.
- chinchlos frumentaceae.**
 smut, Ustilago paradoxa, incidence, India 2138.
- chinchodontium tinctorium.**
 infection, wounding, incidence, Abies concolor 546.
- chineturan.**
 quinones derivatives, Echiumycopsis cell culture, antibacterial activity 673.
- chinomycin.**
 biosynthesis quantification, Streptomyces echinatus, disc-diffusion test 4428.
- chione.**
 quinones derivatives, Echiumycopsis cell culture, antibacterial activity 673.
- chiumycopels.**
 cell culture, quinones derivatives, antibacterial activity 673.
- CHOvirus 1.**
 herbs, infusion, antiviral activity 7950.
 isolation methodology, estuaries sediments 8106.
- CHOvirus 2.**
 antiviral activity, 2-amino-5-(2-N-methyl-sulfamidophenyl)-1,3,4-thiadiazole, derivatives 9693.
 synthetic compounds antiviral activity 6064.
- ilpta alba.**
 leaf blight, Alternaria alternata 8571.
- ological distribution.**
 Actinomadura, soil, antibiotics, antagonism gram-positive bacteria 1487.
 bacteria, soil, Pahokee muck, species diversity, community structure, respiration, enzymatic activity 5912.
 Basidiomycetes, decay fungi, Quercus robur 4158.
 Dictyostelia, species composition, forest floor 5849.
 Dictyostelium, alpine environments 1482.
 Dictyostelium, species composition, alpine environments 1479.
 Fusarium crookwellense sp. nov., soil 3204.
 Nectria cinnabarina, Calosporia innesii, Eutypa acharii, biodegradation, Acer pseudoplatanus 4181.
 phytophthora megasperma f.sp. medicaginis, root rot, disease resistance, Medicago sativa 3913.
 Pseudomonas aeruginosa, incidence, rivers 2621.
 soil microorganisms, dunes stabilization, India 1473.
 vesicular-arbuscular mycorrhizas, habitat, soil properties 570.
 Vibrio, environmental factors, coastal waters 6259.
- ology.**
 Puccinia graminis subsp. graminicola, rust, Gramineae, evolutionary genetics 3004.
 soil microorganisms, books 3635.
 water, microorganisms 1713.
- onazol.**
 antibiotic sensitivity testing, yeasts 2502.
- onomic importance.**
 Quercus decay, Fistulina hepatica, Czechoslovakia 4163.
 watermelon mosaic virus infection, Cucurbita pepo, incidence, prophylaxis, Jordan 1317.
- Economics.**
 activated sludge, solid wastes, digestion (aerobic) 1691.
 food technology, oysters, pasteurization 2936.
- Ecophysiology.**
 microorganisms, rocks habitat, Antarctica 9548.
- Ecosystem analysis.**
 fungi, leaf litter, soil, nutrient cycles, reviews 5889.
- Ecosystem dynamics.**
 forests, wood decay fungi 8646.
 nitrogen cycle, Pinus resinosa, forests 526.
 xenobiotics conversion, microorganisms, models 6961.
- Ecosystems.**
 forests, soil, sulfate metabolism 5102.
- Ectaconazole.**
 powdery mildew control, Rosa 5044.
 treatment, greenhouses plants, powdery mildew disease control 5004.
 use, ornamental plants disease control 5056.
- Ecotomycorrhizas.**
 absorption, nutrient transport, carbon sources, nitrogen sources, trees 9505.
 Agaricales, Gasteromycetes, evolution, reproductive strategy 9535.
 Alpova diplophloea, Hartig net, Frankia colonization, Alnus crispa, Alnus rugosa 7776.
 Basidiomycetes, nodules, Rubus 3208.
 Ceratococcum geophilum, sclerotia, abundance, microenvironments, soil, forests 8894.
 detection, association, Abies concolor, Pseudotsuga menziesii, +Pteridium aquilinum undergrowth 4191.
 effects on, growth, Pinus ponderosa, Pinus sylvestris 6896.
 effects on revegetation Pinus taeda, land reclamation, mines 2305.
 growth, cadmium, lead, effects on 3189.
 growth, cadmium, lead, nickel, effects on 3189.
 growth, relationship, pH 9000.
 Laccaria laccata, inoculation, fertilizer applications, seedlings, Pinus ponderosa, Pseudotsuga menziesii 5852.
 Laccaria laccata, protection Fusarium oxysporum root rot, Pseudotsuga menziesii 3173.
 Laccaria laccata, suppression root rot, Fusarium oxysporum, Pseudotsuga menziesii 4144.
 nutrient transport, absorption, ecophysiology, population ecology, host plants 9539.
 Piloderma croceum, Pisolithus tinctorius, penetration, cell walls, Pinus sylvestris, Picea abies 3165.
 Pisolithus tinctorius, chitin, biomass assays, roots, Pinus pinaster 9506.
 Pisolithus tinctorius, Hartig net, cytology, roots, Pinus strobus 9510.
 Pisolithus tinctorius, water potential, water relations, seedlings, Quercus velutina 9508.
 population density, forests, fertilizer applications, Fagus sylvatica 8649.
 strip mines, soil amendment, spores, association, Picea glauca 1480.
 symbiosis, Eucalyptus marginata, Pinus radiata, association, detection, calcium oxalate crystals, roots, marles 4211.
 symbiosis, incidence, Clitaceae, Tuberaeae 4210.
 symbiosis, Tsuga heterophylla, relationship, survival, association, wood decay, minerals soil 3164.
 ultrastructure, Coniferales 533.
- Ecuador.**
 Triticum aestivum, incidence, Pyrenophora tritici-repentis spot 9356.
- Eczema.**
 livestock, association, fungicides application methodology 4529.
 Pithomyces chartarum, livestock, association, fungicides application methodology 4529.
- Edeline D.**
 peptide mapping, synthesis 9780.
- Edeline F.**
 Bacillus brevis, biosynthesis, isolation, characterization 8917.
- Edema.**
 diagnosis, Escherichia coli neurotoxins serological tests 3885.
- EDTA.**
 antiviral activity, tobacco mosaic virus infection, Nicotiana tabacum, Phaseolus vulgaris 511.
 effects on antibacterial activity, formaldehyde, hydrogen peroxide, Bacillus cereus spores 8772.
 inhibition, trimethylamine-N-oxide reductase, Escherichia coli 269.
 preservatives, seafood 2934.
 resistance, relationship, cations effects on protein H1 biosynthesis, Pseudomonas aeruginosa envelopes 5158.
 +Tris, \pm antibiotics, antibacterial activity, pathogens, bacteria 7080.
 +Tris treatment, Vibrio cholerae lysis, association nitrofurantoin resistance 7927.
 +tromethamine + antimicrobial agents, antibacterial activity, Escherichia coli 8765.
- EDTA-tromethamine.**
 + antimicrobial agents, antibacterial activity, Pseudomonas aeruginosa 8750.
- Education.**
 institutions, floors, keratinophilic fungi isolation 8983.
- Effluents.**
 control, bacteria, fungi, biodegradation, books, conferences 10004.
 laboratories, γ radiation, inactivation, viruses 790.
 petroleum, digestion (anaerobic), bioreactors 5287.
 recirculation, effects on, digestion (anaerobic) bioreactors 9807.
- Efoleite-Al.**
 prophylaxis, treatment, Phytophthora palmivora infection, orchards 5826.
- Egg production.**
 aflatoxins effects on, chickens 4888.
 liquids, Salmonella, Staphylococcus aureus, food contamination 203.
- Egg shells.**
 use immobilized enzymes carriers, β -D-galactosidase, Lactobacillus bulgaricus 9138.
- Eggplant mottled crinkle virus.**
 identification, Solanum melongena isolates 8588.
- Eggs.**
 chickens, food contamination, Clostridium perfringens, Enterobacteriaceae, Staphylococcus 187.
 Eptirix, biological control, Beauveria 985.
 food contamination, bacteria, temperature effects on 4844.
 hatchability, nuclear polyhedrosis virus infection effects on, Hyphantria cunea 1044.

Eggs, (continued)

- lysozymes, antibacterial activity 1552.
Otiomychus sulcatus, biological control, *Metarhizium anisopliae* 986.
 sodium chloride, effects on heat resistance, *Micrococaceae* 4848.
- Egypt,**
 food contamination, aflatoxins 4885.
 leasport, surveys, Medicago sativa 5670.
 Medicago sativa, crown rot, root rot, *Fhizoctonia solani*, *Fusarium*, pathogenicity 5675.
 rivers, drinking water contamination, bacteria 2618.
 rivers, drinking water contamination, parasites 2619.
 waste disposal, composts 2604.
- Egypt, Arab Rep.,**
 deserts, nitrogen-fixing bacteria, species composition, nitrogen fixation efficacy 9617.
 microorganisms, soil isolates, lignins biodegradation, anaerobic conditions 8428.
- Enhrharta calycina,**
 heavy metals uptake, *Glomus fasciculatus* stimulation, acid rain 7805.
- Ehrlich ascites tumor,**
 antitumor activity, *Microtilobosporia grisea* polysaccharides, rats, 6586.
- Ehrlich ascites tumor cells,**
 vesicular stomatitis virus purification methodology 1752.
- Elchornia crassipes,**
 isolation, bacteria identification 3056.
 mycorrhizas 4222.
- nitrogen-fixing bacteria isolates, antibacterial activity, pesticides 8770.
- Elkanella corrodens,**
 drug sensitivity testing, agar dilution test, comparison, broth dilution test 2445.
- Elae,**
 hospital isolates, *Staphylococcus aureus*, antibiotic resistance, gentamicin, methicillin, plasmids role 7032.
 nematophagous fungi, soil 4214.
- Elaeagnus angustifolia,**
 Phomopsis elaeagni canker, incidence, USA, Michigan 9522.
- Elaeagnus umbellata,**
 nodulation, nitrogen fixation, calcium hydroxide, soil amendment effects on 1506.
- Elaphylin,**
 structure, N.M.R., *Streptomyces* 3730.
- Elaphomyces personii,**
 symbiosis, *Vaccinium ashei*, USA, Florida, factors affecting 4192.
- Elastase,**
Bacillus subtilis, purification, characterization, activity 1902.
- Electric currents,**
 hydrogen peroxide formation, phosphates buffers, cytotoxicity, *Escherichia coli* 2451.
- Electric fields,**
 concentration methodology, microorganisms, extraterrestrial life 9001.
- Electrical properties,**
 relationship, water potential, stems, *Verticillium dahliae* infection, *Acer rubrum* 2311.
- Electrical stimulation,**
 beef, bacteria, food contamination 185.
- Electrochemistry,**
 cytochrome c3, polarography, *Desulfotomaculum* 8192.
- Electrodes,**
 Aeronomas phenologenes, use tyrosine measurements 6303.
 arginine, *Streptococcus lactis* use 879.
 construction methodology, *Paracoccus denitrificans* membrane potential analysis 6124.
 nitrifying bacteria immobilized cells, nitrogen dioxide detection 9055.
 nitrifying bacteria, immobilized cells, urea detection 1804.
 oxygen, microorganisms respiration, models 9007.
 oxygen, Nitrobacter immobilized cells, use, sodium nitrite sensors 5430.
 pyruvic acid, use *Streptococcus faecium* 8119.
- Electrolyte balance,**
 relationship, viruses necrosis, *Vigna unguiculata*, environmental stress 2993.
- Electron microscopy,**
 cytology, choriocytol virus infection, *Cichorium intybus* 2165.
 detection, rotavirus (human), feces, man 9864.
 dipyrromol, effects on, pseudorabies virus 3356.
 DNA polymerase I structure, *Escherichia coli* 6535.
 fatty-acid synthetase quaternary structure, *Brevibacterium ammoniagenes* 2763.
 films, waste water, formation, structure 7193.
 grapevine Bulgarian latent virus, infection, *Vitis vinifera*, symptoms 3080.
 Mycoplasma, plant diseases, reviews 9316.
 pathogenesis, anthracnose, *Colletotrichum gloeosporioides*, Carica papaya 8564.
 plasmids DNA isolation, characterization, *Escherichia coli* 6340.
 protein A+gold coating, viruses antigens localization 1750.
 ribosomal subunit 50S crystal structure, *Bacillus stearothermophilus* 4563.
 ubiquinol-cytochrome c reductase, characterization, isolation, *Neurospora* 6486.
- Electron transfer,**
 nitrate reductase (NAD(P)H), *Hansenula anomala* 6517.
- Electron transport,**
 oxygen consumption, soil microorganisms, measuring techniques 1494.
 pentachlorophenol effects on, soil microorganisms 2378.
- Staphylococcus aureus*, antibacterial activity, butylated hydroxyanisole 6050.
- Electrons,**
 radiation, disinfection, sewage sludge 8927.
- Electrophoresis,**
 base composition, DNA, bacteria 7254.
 disease resistance, *Pisum sativum*, wilt, *Fusarium oxysporum* f.sp. *pisi* 4065.
 +enzyme-linked immunosorbent assay, microorganisms antigens 6285.
 enzymes, comparison, yeasts 7422.
 methodology, siderophores detection, microorganisms 8090.
 neuraminidase, *Bacteroides fragilis*, isoelectric focusing, activity 3777.
 Penicillium dextranase 8249.
 peptidase, *Candida albicans* 8542.
 proteins characterization, *Legionella pneumophila* 9128.
 proteins differentiation, *Saccharomyces* species 8208.
 proteins, microorganisms, taxonomy (numerical), computer programs 8091.
Salmonella lipopolysaccharides 9045.
Zea mays mitochondria proteins, disease resistance, *Helminthosporium maydis* 8616.
- Electrophoretic mobility,**
 assays, bacteria, video cassette recorder use 2692.
- Eleteria cardamomum,**
 seeds, fungal flora 7725.
- Eleusine caracana,**
 growth, *Glomus fasciculatus*, interaction, *Streptomyces cinnamomeus*, effects on 2341.
- Eleusine coracana,**
 phyllosphere, nitrogen-fixing bacteria, nitrogen fixation 9590.
- Elongation,**
 plant diseases, *Elsinoe brasiliensis*, disease resistance, inheritance, *Manihot esculenta* 6828.
- Elongation factor G,**
 crystallization, *Thermus thermophilus* 4574.
 purification, characterization, *Thermus thermophilus* 1829.
 C-terminus, crystallization, *Escherichia coli* 2738.
- Elongation factor Ts,**
Escherichia coli, elongation factor Tu, *Bacillus stearothermophilus* purification, interaction 3641.
- Elongation factor Tu,**
 amino acid sequence, *Escherichia coli*, comparison elongation factor 1 α -chain, *Artemia salina* 4573.
Bacillus stearothermophilus, elongation factor Ts, *Escherichia coli*, purification, interaction 3641.
 cysteine residues, N-acyl-L-phenylalanylchloromethane chemical modification, *Escherichia coli* 1836.
 purification, characterization, *Escherichia coli* 1835.
 purification, characterization, *Streptomyces aureofaciens* 1832.
- Elongation factor 1,**
 α -chain, amino acid sequence, *Artemia salina*, comparison elongation factor Tu, *Escherichia coli* 4573.
- Elsinoe,**
 relationship, *Sphaeloma*, pathogenicity, *Euphorbiaceae* 4979.
- Elsinoe brasiliensis,**
 elongation, disease resistance, inheritance, *Manihot esculenta* 6828.
- Elvaseptin,**
 purification, inhibition mitochondria adenosinetriphosphatase, *Tolypocladum* 5.
- Elymoclavine,**
 production, *Claviceps purpurea* 5554.
- Embilca officinalis,**
 fungi infection, ascorbic acid content 3964.
- Embryo cells,**
 chickens, transformation, Rous sarcoma virus, antiviral activity, 2-nitronaphthofuran derivatives 3362.
- Embryo fibroblasts,**
 cytomegalovirus infected, novobiocin, inhibition, replication 2489.
- Embryos,**
Lycopersicon esculentum, tobacco mosaic virus infection 2184.
- Emerickopsis glabra,**
 protoplasts fusion, recombination, β -lactam antibiotics biosynthesis 8806.
- Emerickopsis salmosynnemata,**
 protoplasts fusion, recombination, β -lactam antibiotics biosynthesis 8806.
- Emetine,**
 resistance, *Podospora anserina*, association ribosomal proteins 3274.
- Emex australis,**
 rust, *Uromyces rumicis* infection, pathogenesis, effects on dispersal 425.
- Emodin-1-O-methyltransferase,**
 purification, characterization, *Aspergillus terreus* 38.
- Emollients,**
 relationship, N,N-dimethyldecanamine antibacterial activity 5175.
- Emulsan,**
 Acinetobacter, binding uranium kinetics 7863.
 Acinetobacter calcoaceticus, bacteria mixed culture biodegradation 8424.
- Emulsification,**
 activity, *Acinetobacter calcoaceticus*, association polysaccharides, extracellular levels 1949.
 hydrocarbons, hydrocarbon-degrading bacteria, freshwater environments 5143.
- Emulsifiers,**
 antibacterial activity, anaerobic bacteria, use preservatives canned food 255.
 hydrocarbons, *Pseudomonas* 9632.
- Emulsions,**
 carbon disulfide, effects on nitrifying bacteria 9553.
 undecylenic acid, antifungal activity 7932.
- Encapsulation,**
 association, lipopolysaccharides, *Pseudomonas syringae* pv. *tabaci*, *Nicotiana tabacum*, leaves 3064.
Saccharomyces cerevisiae, protoplasts, products, recovery, methodology 9067.
Staphylococcus aureus, cow's milk, cross-reactivity 7577.
- Encapsulocaryociditis virus,**
 antiviral activity, α -interferon, cell culture 7109.
 antiviral activity, interference, regulation, double-stranded RNA, L cells 7105.
 infected ascites tumor cells, N-phenyl-N'-3-hydroxyphenylthiourea effects on RNA biosynthesis 9683.
 infected ascites tumor cells, N-phenyl-N'-3-hydroxyphenylthiourea effects on protein biosynthesis 9684.
- Endo- β -D-galactosidase,**
 purification, characterization, *Citrobacter freundii* 6449.
 purification, characterization, *Citrobacter kerketovii* 6451.
- Endo-polygalacturonase,**
 characterization, *Trichosporon penicillatum* 91.
- Endo-1,3(4)- β -D-glucanase,**
 affinity exchange chromatography, *Basidiomycetes* 8302.
 histidine residues, photoxidation effects on activity, *Flavobacterium dormitorum* 8477.
 production, *Bacillus amyloliquefaciens*, chemostats 2808.
- Endo-1,3- β -D-xylanase,**
Aspergillus terreus 5510.
 Bacteroides, xylan biodegradation, intestinal microflora, man 2022.
 fungi, use, oranges, extraction, oils, protein 8483.
 isolation, characterization, *Bacillus subtilis* 7378.
 release, spore germination, *Trichoderma reesei* 7331.
Trichoderma longibrachiatum, production, carbon sources effects on 3678.
- Endo-1,4- β -D-glucanase,**
 cellulose hydrolysis, *Chaetomium craspiatum* 9151.
 induction, *Aspergillus terreus* 7330.

endo-1,4- β -D-xylanase,

Bacillus coagulans, physicochemical properties 4685.

Bacillus pumilus, purification, characterization 8299.

purification, characterization, *Trichosporon cutaneum* 1859.

reaction products characterization, *Cryptococcus albidus* 1869.

Sporothrichum thermophile, production 8323.

Streptomyces exfoliatus, purification, characterization 6550.

endocarditis,

Candida albicans, antifungal activity, polyene antibiotics, imidazoles 7935.

Staphylococcus sanguis, neuraminidase production, isolation,

characterization 7372.

endodeoxyribonuclease,

purification, cleavage superhelical DNA, *Escherichia coli* 4691.

endodeoxyribonuclease AIII,

Agrobacterium liquefaciens, purification, characterization, substrate specificity

4141.

endodeoxyribonuclease Eael,

purification, substrate specificity, *Enterobacter aerogenes* 6508.

endodeoxyribonuclease Gaul,

purification, substrate specificity, *Gluconobacter oxydans* subsp. *suboxydans* 4688.

endodeoxyribonuclease Th1111,

purification, characterization, *Thermophilus* 1885.

endonecrose,

association, *Populus*, incidence, USA, Iowa 5851.

Endonecrose flammicorona,

Pinus radiata, *Pseudotsuga menziesii*, New Zealand 7774.

Endohydroxycinnole,

Aspergillus niger, 1,8-cinnole conversion 3736.

Endomyces magnusii,

pH topography, fluorescent probes methodology 8169.

Endomycopsis fibuligera,

α -amylase, exo-1,4- α -D-glucosidase, production 3691.

exo-1,4- α -D-glucosidase, use, ethanol fermentation, association, sweet

potatoes 9230.

exo-1,4- α -D-glucosidase, hydrolysis, starch 6498.

Endomycopsis lipolytica,

2-oximino acids detection, gas chromatography 1843.

Endomycorrhizas,

Acacia holosericea stands nutrient cycles, association 535.

Acer pseudoplatanus seedlings, effects on growth 531.

association, *Populus*, incidence, USA, Iowa 5851.

colonization, growth, phosphorus nutrient availability effects on, *Malus pumila*,

Allium porrum, *Tagetes patulus* 8543.

Glomus fasciculatum, phosphorus nutrient availability, roots levels,

carbohydrates, *Trifolium subterraneum* 9576.

Glomus mosseae, \pm Frankia, effects on nitrogen fixation, *Casuarina*

equisetifolia 3215.

identification, use, enzyme-linked immunosorbent assay 7273.

incidence, Gramineae mixtures 569.

inoculation, infection, roots, ultrastructure, morphology, *Erica carnea* 9504.

nutrient uptake, nutrient availability, phosphorus, *Malus pumila*, *Allium porrum*,

Tagetes patulus 9544.

role *Allium cepa* nutrient uptake, association, soil salinity 7804.

role growth plants, methyl bromide fumigation induction stunt 5913.

roots infection, soil moisture effects on, *Juglans nigra* 6900.

spores, abundance, rhizosphere, trees, land reclamation, mines 9541.

symbiosis development, *Rhododendron ponticum*, structure 3199.

symbiosis, plants, \pm methyl bromide fumigation, growth association, field trials

5910.

Trifolium pratense, vesicles ultrastructure 6974.

\pm *Trifolium repens*, effects on yield 2330.

Zea mays, effects on minerals uptake 4190.

Endonuclease,

complex deoxynucleotides inhibitors complex, conformation, N.M.R., *Staphylococcus*

aureus 7395.

extracellular enzymes; adenine stimulation, *Staphylococcus aureus* 7329.

Serratia marcescens, activity, sodium dodecylbenzene sulfonate, propanol, effects

on 2460.

Endopeptidase,

purification, *Staphylococcus simulans*, amino acids, cyclic AMP, effects on 2792.

purification, characterization, *Streptomyces fradiae* 6473.

Endopolygalacturonase inhibitor,

Pisum sativum, leaves, defense mechanisms, induction, *Ascochyta pisi* infection

1350.

Endosporae,

glutaraldehyde disinfection 5338.

Endosulfan,

antibacterial activity, nitrogen-fixing bacteria, *Eichhornia crassipes* isolates

8770.

Endothia parasitica,

blight, virulence, disease control, *Castanea dentata* 6922.

blight, virulence, disease resistance, *Castanea dentata* 8623.

canker, disease transmission, role, *Acarina*, *Castanea dentata*, USA, Virginia,

USA, West Virginia 6925.

disease control, virulence, blight, *Castanea dentata*, reviews 4165.

media (culture), nutrient requirements, methodology 1814.

virulence, blight, *Castanea dentata*, Greece 6916.

Endotoxin,

Bacillus thuringiensis, amino acid sequence 4911.

Bacillus thuringiensis, cytotoxicity, biological control, *Culicidae* 1018.

Bacillus thuringiensis, genes 1107.

Bacillus thuringiensis, histopathology, biological control, larvae, *Aedes aegypti*

1019.

Bacillus thuringiensis, monoclonal antibodies production, hybridoma 305.

Bacillus thuringiensis, production, media methodology 3888.

Bacillus thuringiensis, stability, toxicity, use biological control, *Culicidae*

294.

Bacillus thuringiensis subsp. *entomocidus*, purification, characterization 7641.

Bacillus thuringiensis subsp. *israelensis*, biological control, *Culicidae* 5553.

Endotoxins,

airborne microorganisms, poultry processing, chickens feces 1277.

2-amino-6-O-(2-amino-2-deoxy- β -D-glucopyranosyl)-2-deoxy-D-glucose,

hydrophobicity regions, *Bordetella pertussis* 7632.

assays, *Limulus* lysate test, urea effects on 8513.

assays, monocytic coagulation 3893.

Bacillus thuringiensis, antigenic characteristics 3720.

Endotoxins, (continued)

Bacillus thuringiensis, pathogenicity, biological control, *Achaea janata* 1038.

bacteria, association prostaglandins, characterization 8515.

bacteria, detection, *Limulus* lysate test, milk 8478.

bacteria, lipopolysaccharides, assays, cerebrospinal fluid 8525.

bacteria lipopolysaccharides, radiation detoxification 5728.

biosynthesis, incubation temperature effects on *Yersinia enterocolitica* 2950.

Bordetella pertussis, 3-hydroxytetradecanoyl substitution 6704.

characterization, *Staphylococcus aureus*, toxic shock syndrome isolates 6706.

Clostridium perfringens, detection, enzyme-linked immunosorbent assay 5855.

contamination, cotton 5659.

contamination, enzymes, enzyme-linked immunosorbent assay 9826.

cutaneous dust 5663.

dust, pigs housing 7638.

Escherichia coli lipopolysaccharides, radioimmunoassay, solid phase methods 9296.

gram-negative bacteria, cotton contamination, effects on respiratory function,

man 1320.

gram-negative bacteria, localization, cotton 4913.

indicators, food contamination, *Staphylococcus* 3810.

levels, seafood, *Limulus* lysate test 2956.

levels, waste disposal sites, composts 5292.

Limulus lysate test, reaction, immunoelectrophoresis detection 9308.

magnesium, enhancement, *Limulus* lysate test, sensitivity, detection 5379.

Neisseria meningitidis, *Limulus* lysate test, assays 289.

purification, characterization, *Vibrio* 300.

susceptibility, geographical variations, *Bacillus thuringiensis*, *Anopheles*

stephensi, *Aedes aegypti*, *Aedes albopictus*, India 293.

toxicity testing, *Limulus* lysate test, legislation 6712.

Energy,

consumption, fermenters, oxygen adsorption coefficients 8406.

maintenance, calorimetry, *Saccharomyces cerevisiae* ethanol fermentation 7528.

Energy balance,

microorganisms, mathematical models 8191.

Energy budget,

Glycine max, photosynthesis, carbon sources, utilization, *Rhizobium*, nitrogen

fixation 9603.

Enkephalin,

hydrolysis, *Pseudomonas*, *Chromobacterium violaceum*, enzymatic activity, bestatin

analogs effects on 7551.

Ennatin,

Fusarium oxysporum, production, nutrient requirements 6206.

Enocin,

antibacterial activity, *Streptococcus* group A 1677.

Enolase,

substrates binding, metals effects on, N.M.R., yeasts 6544.

3-Enolpyruvylthiohydramide-5-phosphate synthase,

phosphonomethylglycine inhibition, *Neurospora crassa* 4668.

Enoxacin,

antibacterial activity, *Enterobacteriaceae* 9636.

Enoyl-CoA hydratase,

purification, characterization, *Clostridium acetobutylicum*, *Escherichia coli*

8243.

Enseifer adhaerens,

predator behavior, soil, characterization, use, phages, monitoring 5090.

Enteritis,

Campylobacter fetus subsp. *jejuni*, clinical isolates incidence, antibiotic

resistance, man 8733.

Campylobacter fetus subsp. *jejuni*, man, epidemiology, Sweden, food contamination

2055.

man, *Campylobacter fetus* subsp. *jejuni* food contamination, milk 1078.

viruses, isolation methodology, estuaries sediments 8106.

Enterobacter,

antibacterial activity, β -lactam antibiotics 4340.

antibacterial activity, acylureidopenicillins, antibiotic antagonism,

cephalosporins 6144.

antibacterial activity, antibiotic synergism, clavulanic acid, ticarcillin 6147.

antibacterial activity, antibiotic synergism, semisynthetic penicillins,

aminoglycoside antibiotics 7125.

antibacterial activity, cephalosporins 4341.

antibacterial activity, mezlocillin, azlocillin, \pm cephalosporins 6148.

antibacterial activity, norfloxacin 7062.

antibacterial activity, piperacillin 9757.

antibiotic sensitivity testing 6111.

aztreonam antibacterial activity 777.

carbon sources, factors affecting acetylglucose reduction 4244.

cefotaxime, moxalactam, antibacterial activity companion, antimicrobial agents

6126.

cefotetan antibacterial activity 7138.

cephalosporins antibacterial activity 4347.

clinical isolates, antibacterial activity, cephalosporins 9740.

distribution, feeds, radiation disinfection 7605.

glycosidases biosynthesis 5516.

β -lactamase, inhibition, clindamycin 7155.

β -lactamase, isoelectric focusing methodology, cellulose acetate membranes

9038.

meclizolam \pm β -lactam antibiotics antibacterial activity 3314.

norfloxacin antibacterial activity 2440.

pathogenicity effects on, *Beta vulgaris* crop production 403.

pili, hemagglutins biosynthesis 8364.

pyrimidic acid antibacterial activity 1556.

species, wetwood etiology, *Ulmus americana* 8657.

urinary tract clinical isolates, norfloxacin antibacterial activity 9671.

urinary tract isolates, antibiotics sensitivity 8813.

xanthine oxidase, bioassays, phosphorus 5473.

Enterobacter aerogenes,

acetylacetate decarboxylase use, beer maturation 136.

antibacterial activity, cephalosporins derivatives 8838.

antibacterial activity, Cephalosporins derivatives, structure-activity

relationships 8840.

endodeoxyribonuclease Eael, purification, substrate specificity 6508.

extracellular enzymes pullulanase inducers 3680.

Subject Index

- Enterobacter aerogenes**, (continued)
histamine production, media (culture), seafood 2674.
immobilized cells, adenine arabinose production 981.
inactivation, food spoilage rates, incubation temperature effects on 2926.
indicator species, association, drinking water, waste water, water sources 797.
post-harvest decay, etiology, Manihot esculenta 3102.
- Enterobacter agglomerans**,
contamination, cotton 1320.
- Enterobacter cloacae**,
amoxycillin+clavulanic acid resistance 4275.
amoxycillin+clavulanic acid resistance 4276.
M.K. 0366 antibacterial activity 6055.
antibacterial activity, cefoperazone 7144.
antibacterial activity, temocillin 5254.
antibiotic resistance, cephalosporins, role, β -lactamase activity 7036.
antibiotic resistance, population studies 629.
antibiotic SM-1652 antibacterial activity 3398.
bactericidal activity, hydrazine, kinetics 9677.
beads extraction, β -lactamase release 2806.
biodegradation, straw, role, soil, volcanic ash, stabilization 5091.
biotyping 3592.
cefotetan antibacterial activity 5198.
cephalosporins antibiotic resistance, selection 5157.
clinical isolates, antibiotic sensitivity testing 726.
N-formimidoyl thienamycin, antibacterial activity 3430.
 β -lactamase, antibiotic tolerances, β -lactam antibiotics, screening 637.
 β -lactamase, clavulanic acid analogs, inhibition 6214.
 β -lactamase isolation, purification 4665.
 β -lactamase, purification, kinetics 9140.
lactic acid biosynthesis 8206.
plasmid pRD1 transfer, Escherichia coli, nitrogen fixation 5113.
purines biodegradation, aerobic conditions 3794.
seed treatments, biological control, Pythium rot, Beta vulgaris, Cucumis sativus, Pisum sativum 9481.
- Enterobacteriaceae**,
aminoglycoside antibiotics, antibiotic sensitivity testing 4351.
animal isolates, antibiotic resistance, lincomycins, streptogramins, macrolide antibiotics 660.
antibacterial activity, amikacin+cephalosporins, +moxalactam 1614.
antibacterial activity, antibiotic synergism, semisynthetic penicillins, aminoglycoside antibiotics 7125.
antibacterial activity, aztreonam 6203.
antibacterial activity, cefotetan 4339.
antibacterial activity, cefoxitin, ceftiozime, antibiotic antagonism, penicillins 2533.
antibacterial activity, ceftazidime 4367.
antibacterial activity, cephalosporins 1606.
antibacterial activity, cephalosporins 4343.
antibacterial activity, cephalosporins 4362.
antibacterial activity, ciprofloxacin 9661.
antibacterial activity, dibekacin, comparison, tobramycin 2584.
antibacterial activity, mezlocillin, amoxicillin+clavulanic acid 745.
antibacterial activity, mezlocillin, penicillins, cephalosporins 9709.
antibacterial activity, moxalactam 5269.
antibacterial activity, moxalactam, ceftazidime, cephalosporins 4344.
antibacterial activity, moxalactam, gram-negative bacteria, antibacterial activity, moxalactam 5276.
antibacterial activity, nalidixic acid, ciprofloxacin, norfloxacin, pипemidic acid 7924.
antibacterial activity, O-demethylfortimicin 4413.
antibacterial activity, pyridoncarboxylic acid derivatives 7086.
antibacterial activity, Streptomyces rishinensis 1672.
antibacterial activity, substituted pyridyl [2,3-b] pyrazine-1,4-dioxide 2437.
antibacterial activity, surfactants, effects on Hly plasmid 4296.
antibacterial activity, temocillin 2554.
antibacterial activity, temocillin 5254.
antibacterial activity, temocillin, ampicillin 2552.
antibacterial activity, vancomycin+rifampicin 772.
antibiotic antagonism, piperacillin+azlocillin 3387.
antibiotic resistance, clinical isolates 6021.
antibiotic resistance, heavy metals resistance, fresh water, harbors sediments isolates 9645.
antibiotic resistance plasmids, structure, incidence 6025.
antibiotic resistance, transfer, role, R factors 1543.
antibiotic sensitivity testing 2393.
antibiotic sensitivity testing 6096.
antibiotic sensitivity testing 9636.
antibiotic sensitivity testing 9722.
antibiotic sensitivity testing, antibiotic resistance, moxalactam, cefoperazone, cefotaxime 5271.
antibiotic sensitivity testing, media (isolation) 9711.
antibiotic sensitivity testing, relationship treatment, experimental infection, mice 9715.
antibiotic SM-1652 antibacterial activity 3398.
antigens use classification 2666.
cefoperazone A antibacterial activity 7980.
cefotaxime, comparison, moxalactam, antibacterial activity 6125.
cefotetan antibacterial activity 5198.
ceftazidime antibacterial activity 6121.
ceftazidime antibacterial activity 6122.
children blood culture, detection, use, acidine orange, gram stain, methylene blue 8140.
clinical isolates, antibacterial activity, azlocillin 8847.
clinical isolates, antibacterial activity, cefoxitin, tobramycin, comparison N-formimidoyl thienamycin 7078.
clinical isolates, antibacterial activity, ceftazidime, cefotaxime, moxalactam 4365.
clinical isolates, antibacterial activity, gentamicin, tobramycin, netilmicin, media analysis 7074.
clinical isolates, antibiotic sensitivity testing 726.
clinical isolates, blood culture, sucrose effects on detection 9955.
clinical isolates, identification, API test, Enterotube test 4492.
clinical isolates, identification, Sensititre system 9916.
contamination, mineral water, bacteria 2027.
detection, identification, susceptibility, methodology 9901.
- Enterobacteriaceae**, (continued)
distribution, antibiotic resistance plasmids, trimethoprim, gentamicin 3302.
drug resistance, R factors analysis, association, nosocomial infection 1541.
enterotoxins biosynthesis, plasmids role 8524.
R factors, antibiotic resistance transfer, wastewater treatment 1548.
food contamination, chickens carcasses, radiation, temperature, effects on 4786.
food contamination, chickens eggs 187.
food contamination, enumeration equipment 3575.
food contamination, ripening, salami 2030.
N-formimidoyl thienamycin, antibacterial activity 3430.
N-formimidoyl thienamycin antibacterial activity 7075.
hydrogen gas production, formate conversion 4708.
hydrogen sulfide biosynthesis, differentiation media 6603.
identification, API test, automated methods 859.
identification, API test, Micro-ID test 838.
identification, automated methods 9942.
identification, media (culture) 6311.
identification, methodology 7236.
identification, urinary tract isolates, methodology 9032.
incidence, food, Mexico 7594.
infection, antibiotic resistance, juveniles, cattle 643.
isolates, cattle, antibiotic sensitivity testing 6095.
isolates, pneumonia, bronchitis, man, antibiotic resistance 1537.
lactic acid fermentation, vegetables 5607.
media (isolation), food contamination, dairy products, cocoa 1791.
modification enzymatic, aminoglycoside antibiotics, association, antibiotic resistance 640.
nalidixic acid antibacterial activity, comparison, Aeromonas hydrophila 9673.
picromidic acid antibacterial activity 1556.
semisynthetic penicillins, antibacterial activity 746.
soaps contamination 2641.
spillage, beef, vacuum packaging, refrigeration 5638.
spillage, meat, vacuum packaging, carbon dioxide packaging 4879.
spillage, onions, beets, vacuum packaging 4882.
sulbactam, antibacterial activity 2545.
sulfonamide susceptibility, association, cotrimoxazole drug resistance 6004.
survival, marine environment, 15 min 3467.
temocillin antibacterial activity 2550.
trimethoprim, drug resistance, gene transfer, plasmids 3298.
urinary tract isolates, trimethoprim, drug resistance, British Isles 6007.
temocillin antibacterial activity 6155.
- Enterobacterin**,
effects on, soil properties, soil microorganisms 4256.
- Enterococci**,
scandium, indium, complex, antibacterial activity, Escherichia coli 1554.
- Enterococcus**,
soaps contamination 2641.
- Enterobium cloacium**,
Ravennella lagerheimiana infection, fungicides, disease control 8656.
- Enterotoxin A**,
biosynthesis, Micrococcaceae 3886.
Staphylococcus, detection, enzyme-linked immunosorbent assay, methodology 930.
- Enterotoxin B**,
biosynthesis, Micrococcaceae 3886.
Staphylococcus aureus, biosynthesis, culture methodology, purification 2963.
Staphylococcus aureus, transport, processing 2081.
- Enterotoxin C**,
biosynthesis, Micrococcaceae 3886.
Staphylococcus aureus, radiomunoassay solid phase methods 9295.
- Enterotoxin F**,
Staphylococcus aureus, purification, characterization 4905.
Staphylococcus aureus, purification, characterization 9297.
- Enterotoxins**,
amino acid sequence, Escherichia coli 4915.
amino acid sequence, Escherichia coli 6721.
amino acid sequence, Escherichia coli 6722.
antigenic determinants, Vibrio cholerae, Escherichia coli 6714.
biosynthesis, Enterobacteriaceae, plasmids role 8524.
biosynthesis, Escherichia coli, animal isolates 665.
biosynthesis, Escherichia coli, media (culture) methodology 9299.
biosynthesis, Escherichia coli, media (culture) methodology, conferences 9881.
biosynthesis, Micrococcaceae 3886.
biosynthesis, plasmids role, Escherichia coli, association eukaryotes adenylate cyclase activation 7642.
biosynthesis, Staphylococcus, media (culture) 1115.
biosynthesis, Vibrio cholerae, Vibrio mimicus, continuous culture, recycling 8517.
characterization, Escherichia coli, Vibrio cholerae, use, immunodiffusion, neutralization 7634.
characterization, purification, Vibrio cholerae 8516.
characterization, Salmonella 6707.
cholera, biosynthesis, Vibrio cholerae 6713.
Clostridium perfringens, assays 6711.
Clostridium perfringens, detection methodology 2964.
components, biosynthesis, Escherichia coli 2088.
Escherichia coli, agglutination detection 9305.
Escherichia coli, agglutination measuring techniques 9302.
Escherichia coli, assays, Vero cells, rats, ileum 310.
Escherichia coli, chemical properties 9313.
Escherichia coli, detection, agglutination 9311.
Escherichia coli, detection, enzyme-linked immunosorbent assay, methodology 996.
Escherichia coli, detection, hybridization analysis, enzyme-linked immunosorbent assay 4903.
Escherichia coli, enzyme-linked immunosorbent assay 9304.
Escherichia coli, enzyme-linked immunosorbent assay, sonication 2961.
Escherichia coli, enzyme-linked immunosorbent assay 9310.
Escherichia coli, food poisoning, man, reviews 1104.
Escherichia coli, heat activation 3894.
Escherichia coli, methodology detection 6729.
Escherichia coli, peptides, synthesis, biological properties 2086.
Escherichia coli, physicochemical characteristics 3887.
Escherichia coli, purification 5656.
Escherichia coli, purification, characterization 5657.
Escherichia coli, purification, gel electrophoresis 290.

enterotoxins, (continued)

Escherichia coli, purification, physicochemical properties, amino acid sequence, relationship pathogenicity 4910.
 Escherichia coli, radioimmunoassay 9294.
 Escherichia coli, subunit structure, immunochemistry 291.
 gram-negative bacteria, in vitro, characterization 304.
 Klebsiella pneumoniae, physicochemical properties 6715.
 plasmids, Escherichia coli, gene transfer, antibiotic resistance 3299.
 production, milk, Escherichia coli, Yersinia enterocolitica 1111.
 production, Staphylococcus 2959.
 Staphylococcus aureus, clinical isolates, food isolates 1113.
 production, Staphylococcus aureus, milk 2965.
 production, Vibrio 2949.
 purification, amino acid sequence, Escherichia coli 2955.
 purification, characterization, Vibrio cholerae, Escherichia coli 292.
 purification, physicochemical properties, Staphylococcus aureus 7644.
 Salmonella enteritidis, biosynthesis, nutrient requirements 1105.
 Salmonella typhimurium, isolation, characterization 4916.
 Staphylococcus aureus, biosynthesis, chickens 6727.
 Staphylococcus aureus, biosynthesis, sodium chloride, potassium chloride, ripening, cheddar cheese 2037.
 Staphylococcus aureus, detection, enzyme-linked immunosorbent assay, immunodiffusion 6710.
 Staphylococcus aureus, enzyme-linked immunosorbent assay, milk 1109.
 Staphylococcus aureus, production, growth, packaging, sandwiches 1091.
 Staphylococcus aureus, reviews 6723.
 Staphylococcus aureus, toxigenicity 7631.
 Staphylococcus, food contamination, detection, enzyme-linked immunosorbent assay 1110.
 Staphylococcus food contamination, milk products, India, incidence 2058.
 Staphylococcus, identification, counter immunoelectrophoresis, immunofluorescence 4918.
 Staphylococcus, production 2067.
 Streptococcus, detection, food poisoning man 3892.
 N-terminal, amino acid sequence, Clostridium perfringens 5660.
 toxigenicity, Staphylococcus aureus isolates, milk 6716.
 vibrio cholerae, Escherichia coli, neutralization 2957.
 Vibrio cholerae production, media (culture) 3891.
 Vibrio cholerae, purification, characterization 2951.
 Yersinia enterocolitica, detection, assays, factors affecting 9307.
 Yersinia enterocolitica, production stability, methanol solubility 7633.
 Yersinia enterocolitica, purification, characterization, conferences 9298.
merotube test,
 API test, clinical isolates, identification 4492.
merovirus,
 bentonite immobilization, bacteria contamination, ethanol bactericidal activity 3523.
 contamination, breast milk, man 4770.
 contamination, water, filtration methodology 3520.
 disinfection, sewage sludge 8936.
 identification, counter immunoelectrophoresis 1753.
 indicator species, ground water microbial pollution 8979.
 isolation, sewage, immunoelectron microscopy 3468.
 microbial pollution, survival, saline environments 1720.
 microbial pollution, water pollution, pollution detection, Perna canaliculus 3516.
 movement, waste disposal sites, aquifers 5328.
 sewage sludge, relationship vaccination, man 3470.
 synthetic compounds antiviral activity 6064.
 water pollution, sediments, sewage outfalls 796.
ntomophthoraceae,
 infection, Aphis fabae, fungicides effects on 489.
ntomophthorales,
 biological control, Aphididae, Gramineae 8360.
 biological control, conidia, spores, survival, Insecta 1009.
 biological control, Psila rosae, field trials 9210.
 culture, use, biological control, Insecta 1805.
 isolation, culture, methodology, Insecta 1783.
 pest control, biological control, Insecta 1000.
 pest control, virulence, bioassays, Insecta 1001.
ntomosporium mespilii,
 leafspot, Raphiolepis indica, Raphiolepis delacouri 5775.
ntormiza casparyana,
 ticks, Juncus articulatus 9403.
nytioma brizae,
 smut, Gramineae 2129.
nytioma dactylidis,
 smut, Gramineae 2129.
numeration,
 bacteria, meat products 1063.
nielopes,
 infectious anemia virus, glycoproteins, isolation, lectins affinity
 immunology 8097.
 Pseudomonas aeruginosa, membrane proteins, antibiotic resistance, polymyxin 2414.
nvironmental conditions,
 association, under infectious disease, cattle 6272.
 mixed culture, Hydrodictyon reticulatum + Tetraselmis, effects on fermentation 2858.
 Oriza sativa, effects on blast pathogenesis 1169.
nvironmental effects,
 Claviceps purpurea alkaloids biosynthesis 129.
 immobilized cells, reviews 1737.
 industrial wastes, industrial sites, petroleum, bibliographies 2609.
 man-made products, biodegradation, biodegradation 4758.
 Micrococcus, isolation, poultry, radioresistance 202.
 pathogenicity, Bacillus thuringiensis, Culex pipiens, Aedes aegypti 295.
 pathogenicity, pest control, Bacillus thuringiensis, Culex pipiens 296.
 pulp mills, industrial effluents, wastewater treatment, bibliographies 2608.
 wastewater treatment, water quality, microbiology, bibliographies 2606.
nvironmental factors,
 disease spread, Pseudomonas syringae pv. tomato, speck, Lycopersicon esculentum 1297.
 effects on, fungi, mycotoxins biosynthesis 284.
 soil depth, soil microorganisms, relationship, Verticillium dahliae fungistasis 584.
 Vibrio, ecological distribution, coastal waters 6259.

Environmental hygiene,

antibiotics use, bacteria nosocomial infection, man 8981.
 bacteria disinfection 5349.
 bacteria nosocomial infection, man, disease control 3495.
 laboratory animals, bacteria 5334.
 nosocomial infection, urinary tract, bacteria, incidence, man 8074.
 operating theaters, hospital personnel 803.
Environmental impact,
 atmosphere nitrogen, photochemistry 604.
 cattle, grazing, surface water, water quality, USA, Colorado 8973.
 recreation, soil properties, forests 6892.
 volcanoes, USA, Washington, effects on nitrogen cycle, lakes, bacteria 5122.
Environmental monitoring,
 drinking water bacteria levels 1717.
Environmental requirements,
 Phymatotrachium omnivorum, geographical distribution, limiting factors, soil characteristics 9557.
Environmental stress,
 nutrient availability, competition, sclerotia germination, fungi, soil 9573.
 Vigna unguiculata, viruses necrosis, relationship, electrolyte balance 2993.
Environmental surveys,
 bacteria, marine environment, association, bubbles, methodology 4495.
 isolation, thermophilic fungi 3190.
Environments,
 gases, crop residues fermentation, Aspergillus oryzae, Trichoderma reesei, Streptomyces, reviews 4723.
 isolates, methanogenic bacteria, high-performance liquid chromatography phospholipids assays 5382.
Enzymatic activity,
 bacteria, soil, Pahokee muck, species diversity, community structure, ecological distribution 5912.
 soil microorganisms, biomass, crop fields, agricultural practices effects on 5980.
 soil microorganisms, phosphatidyl choline, degradation, mineralization, nutrient sources, plants 5915.
 soil properties, tundra 5884.
Enzyme immunoassay,
 antibiotics, body fluids 9724.
 comparison radioimmunoassay, detection, hepatitis B surface antigen 7220.
 detection, Bacillus anthracis immunoglobulin G antibody response, immune serum, rabbits 855.
 detection, Chlamydia trachomatis immunoglobulin G 9894.
 detection, influenza A virus antigens 9840.
 gentamicin, automated methods 3414.
 α -interferon antiviral activity, relationship vesicular stomatitis virus antigens biosynthesis 1762.
 interferon levels, tissue culture vesicular stomatitis virus infection 1749.
 labelling, Escherichia coli β -D-galactosidase use, S-100 protein measuring techniques, cerebrospinal fluid, man 857.
 myeloma proteins monoclonal antibodies, detection, Salmonella, methodology 7241.
 serum levels, gentamicin, clinical aspects 3413.
 Staphylococcus aureus protein A, solid phase methods, urine albumin 5397.
Enzyme-linked immunosorbent assay,
 antibodies detection, measles virus 8093.
 Bacillus thuringiensis proteins, detection 3561.
 barley yellow dwarf virus, cowpea mosaic virus, antisera production, rabbits 6297.
 Bordetella pertussis hemagglutinins antibodies 889.
 Bordetella pertussis, hemagglutinins, purification, characterization 886.
 Bordetella pertussis toxins, binding haptoglobin 6720.
 Brucella cross-reactivity Yersinia, diagnosis brucellosis, man 8143.
 caravanseris antigenic relationship, association F(ab')₂ 3529.
 botulinum toxin, Clostridium difficile, Clostridium difficile, toxin A 9303.
 detection adenovirus (human) 5 antibody response, man 3544.
 detection antibodies, antigen Vi, Salmonella typhi 9920.
 detection antibodies, Aspergillus fumigatus, aspergillosis, man 9990.
 detection, antibodies, Bordetella bronchiseptica, methodology 3611.
 detection, antibodies, togavirus, methodology 1746.
 detection, antibodies, virus, maedi virus, sheep, goats 2651.
 detection antigens, Erwinia salicis, Watermark disease, Salix alba 6919.
 detection, antigens, mycoplasma-like organisms, yellows, Callistephus chinensis 8597.
 detection, Autographa californica nuclear polyhedrosis virus, in vivo, in vitro 8104.
 detection, bacteria, Prunus persica phony disease 7684.
 detection, bean pod mottle virus, vectors, Ceratoma trifurcata, Glycine max 3067.
 detection, beet yellows virus, beet mild yellowing virus, Beta vulgaris leaves extracts 3527.
 detection, cacao swollen shoot virus, Theobroma cacao 7221.
 detection, canine distemper virus, antigens, immunoglobulin G, methodology 5369.
 detection, carnation mottle virus, carnation ringspot virus, Dianthus caryophyllus 831.
 detection, carnation mottle virus, meristem tip culture, Dianthus caryophyllus 7223.
 detection, Chlamydia trachomatis, antibodies 3605.
 detection, Chlamydia trachomatis, immunoglobulin G, immunoglobulin M 9931.
 detection, Clostridium perfringens enterotoxins 5655.
 detection, coronavirus antibodies 9849.
 detection, enterotoxins, Escherichia coli 4903.
 detection, enterotoxins, Escherichia coli, methodology 9969.
 detection grapevine fanleaf virus, infection, Vitis vinifera 1240.
 detection, grapevine fanleaf virus, Vitis vinifera 2160.
 detection, immunoglobulin G, antigens, herpes simplex virus 2 7227.
 detection, immunoglobulin G, cytomegalovirus 5375.
 detection immunoglobulin G, immunoglobulin M, Staphylococcus teichoic acid, immunodiagnosis infection, man 9919.
 detection, Legionella pneumophila antibodies 9902.
 detection, measles virus immunoglobulin G 9857.
 detection, mumps virus immunoglobulin A, man 3528.
 detection, necrotic yellows virus, Lactuca sativa, vectors, Hyperomyzus lactucae 415.
 detection, nuclear polyhedrosis virus infection, Trichoplusia ni 2656.
 detection, plant viruses, Triticum aestivum, Hordeum vulgare 6757.
 detection, potato leaf roll virus, tubers, Solanum tuberosum 9404.
 detection, Pseudomonas aeruginosa lipopolysaccharides 9915.

Enzyme-linked immunosorbent assay, (continued)

- detection, rubella virus immunoglobulin G, antigens attachment methodology 985.
 detection, ryegrass mosaic virus, ryegrass seed-borne virus, Lolium multiflorum, Lolium perenne 6758.
 detection, seed-borne diseases, viruses 7219.
 detection, soybean mosaic virus infection, Glycine max seeds 343.
 detection, Spiroplasma citri, Vinca rosea, Eschscholus variegatus 3046.
 detection, Spiroplasma stunt, Zea mays 3011.
 detection, Staphylococcus aureus teichoic acid antibodies 9939.
 detection, Staphylococcus enterotoxins, food contamination 1110.
 detection, tobacco rattle virus, Solanum tuberosum tubers, Narcissus 6808.
 detection, Ureaplasma urealyticum antibodies 9871.
 detection, Xanthomonas campestris pv citri 5381.
 diagnosis hepatitis A, feces, man 4469.
 + electrophoresis, microorganisms antigens 6285.
 enterotoxins, Escherichia coli 9304.
 enterotoxins, Escherichia coli, sonication 2961.
 enzymes contamination, endotoxins 9826.
 equipment cleaning systems 1764.
 Escherichia coli, enterotoxins 9310.
 feces, rotavirus detection 9011.
 glass beads, solid phase methods, rotavirus (human) detection 5370.
 hepatitis B surface antigen 9016.
 hepatitis B surface antigen antigen-antibody complexes, use seroepidemiology, man 822.
 hepatitis B surface antigen detection, factors affecting sensitivity 5367.
 hepatitis B surface antigen, use, Ammoracia lapathifolia peroxidase 825.
 herpes simplex virus, serotyping 9853.
 identification, barley yellow dwarf virus 1768.
 immunochemistry, toxoids, Neisseria meningitidis, polysaccharides 4430.
 immunoglobulin G, anti polysaccharides, Streptococcus group B 5392.
 immunoglobulin M, measles virus 9013.
 immunoglobulins detection, rubella virus specificity, man 3531.
 interspecific interactions, C-type virus (mammalian) proteins 1760.
 Legionella, carbohydrates antigens 6307.
 Leptospira interrogans ser. hardjo, Leptospira interrogans ser. pomona, antibodies, cattle 8118.
 lettuce mosaic virus detection, Lactuca sativa seeds, USA, Florida 5017.
 localization, necrotic ringspot virus, pollen, Prunus 2148.
 methodology, Aspergillus fumigatus antibodies, man 3624.
 methodology, detection, densonucleosis virus 4475.
 methodology, detection, microorganisms antigens 7216.
 methodology, detection, Staphylococcus enterotoxin A 9309.
 monoclonal antibodies, feline leukemia virus 9850.
 monoclonal antibodies, typing, herpes simplex virus 1, herpes simplex virus 2 9843.
 Neisseria gonorrhoeae 1780.
 Neisseria gonorrhoeae antigens 3565.
 Neisseria gonorrhoeae, use diagnosis, gonorrhea 1796.
 Neisseria meningitidis antigens detection 5396.
 + nylon, use, detection, influenza virus 4469.
 plants viruses, antigenic variants detection 1757.
 poliovirus 1 6300.
 potato virus Y detection, vectors, Myzus persicae 3517.
 radioactivity measuring techniques, radioactive labelling, tobacco mosaic virus 8939.
 Rift Valley fever virus 9854.
 Ross River virus, immunoglobulin M serum levels, detection, polyarthritis, man 9834.
 rubella virus serum antibodies, immune status, comparison, indirect hemagglutination, hemagglutination inhibition 9837.
 sensitivity, detection, viruses infection, plants 3530.
 serotyping, rotavirus 1743.
 Staphylococcus aureus enterotoxins detection 6710.
 Staphylococcus aureus enterotoxins, milk 1109.
 surveys, viruses, Dianthus caryophyllus 1294.
 T-2 toxin, Fusarium tritici 4891.
 use, amidease, diagnosis, hepatitis, viruses 2659.
 use, detection, hepatitis B surface antigen antibodies 4470.
 use, detection, infection, potato virus S, potato virus X, Solanum tuberosum 1242.
 use, identification, endomycorrhizas 7273.
 use, monoclonal antibodies, detection, bovine leukemia virus antibodies 4474.
 use, Mycobacterium smegmatis arabinomannan, diagnosis, leprosy, man 6328.
 use, rabies virus vaccines 820.
 varicella-zoster virus, immunoglobulin M detection, man 1751.
 viruses detection, clinical microbiology 9858.

Enzyme-linked immunosorbent assay,

Escherichia coli, enterotoxins 9310.

Enzymes

- activity, Cucurbita maxima, watermelon mosaic virus infection effects on 9434.
 activity, drying, immobilized cells, Streptomyces phaeochromogenes 906.
 activity, insecticides effects on, soil microorganisms, agricultural land 5969.
 activity, Neisseria meningitidis, pyrimidines biosynthesis 8340.
 activity, soil microorganisms, soil amendment, carbon, sodium chloride, sodium carbonate, effects on 5927.
 activity, soil, microorganisms, soil, storage effects on 5919.
 activity, soil, pH effects on 2338.
 aminoglycoside antibiotics inactivation mechanisms, role, bacteria antibiotic resistance 6005.
 analysis, alginic acid biosynthesis, Azotobacter vinelandii continuous culture 9129.
 antibiotics, biosynthesis improvements, microorganisms strains combination cultivation, reviews 6548.
 Arthrobacter, hydrolysis, malation, characterization 8416.
 assays, acetic acid, bacteria supernatants 7234.
 assimilation, biosynthesis, carbon limitations, Kleocera growth, methanol concentration 6552.
 association, Streptomyces venezuelae chloramphenicol biosynthesis, mechanisms 9857.
 Aureobasidium pullulans, production 1852.
 Bacillus, production, genetic engineering 987.
 bacteria menaquinone biosynthesis, reviews 6628.
 bacteria, separation techniques, ultrafiltration 9167.
 bacteria, technology, clinical microbiology, use 970.
 bacteria, yeasts, purification, characterization, books 7275.
 Basidiobolus, Conidiobolus, API test, identification 899.
 biochemical characteristics, soils (loam) 562.
 biosynthesis, Keratinophilic fungi, dermatophyte fungi, media (culture) 3630.
 biosynthesis, Lysobacter azymogenes, factors affecting 8297.
 biotechnology, books 8179.
 Claviceps purpurea, detection, immunofluorescence, association, Gramineae infection 5707.
 conversion, steroids, bacteria 7433.
 Coriolus, use, melanoidin coloration removal 150.
 Cucumis sativus, tobacco necrosis virus infection, osmotic stress effects on 413.
 cyclic AMP effects on Klebsiella pneumoniae 1938.
 detection, methodology, yeasts 8168.
 detection, polysaccharides degradation, Ampelomyces quisqualis 8319.
 electrophoresis, companion, yeasts 7422.
 factors affecting, inactivation, antibiotic resistance, streptomycin, biosynthesis, Streptomyces griseus 1547.
 factors affecting, Theilaviopsis paradoxa soft rot, Citrus media 5738.
 Fusarium solani, use, oxidation, syringaresinol 4730.
 Glycine max, nodules, effects on nitrogen fixation, Rhizobium japonicum 8694.
 hydrocyanic acid production, Pseudomonas, fractionation methodology, column chromatography + detergents, anaerobic conditions 4505.
 hydrolysis, lignocellulose, cellulolytic microorganisms, reviews 7540.
 immobilization, albumen supports bactericidal activity 9668.
 inhibition on activity, Escherichia coli microcin 15n 8235.
 isolation, Escherichia coli pOla gene amber mutant, characterization 7379.
 isolation, thiosulfate oxidation, marine environment, Pseudomonas 7404.
 isovaleric acid biosynthesis, isolation, characterization, Clostridium bi fermentans 9174.
 lipid metabolism, bacteria, fungi, books 9090.
 metabolism, methane, methylotrophic bacteria 7871.
 metabolism, microorganisms, detergents effects on, reviews 6399.
 microorganisms, sodium, forests soil analysis, land reclamation 7822.
 Neurospora crassa, Aspergillus terreus, use, oranges, extraction, oils, protein 8483.
 Nocardia erythropolis, sterols biodegradation 1948.
 oxidoreductase, use, biotechnology, reviews 9145.
 production, association, Pseudomonas fluorescens batch culture 108.
 production, fermentation 4678.
 production, regulation, reviews 4675.
 Pseudomonas pseudomallei, Salmonella typhimurium, ureidosuccinic acid dihydrazide effects on 6056.
 regulation, Neisseria meningitidis, pyrimidines biosynthesis 8341.
 role, denitrification, pathway, reviews 5118.
 Saccharomyces lipolytica, activity association overproduction, isocitric acid, citric acid 5483.
 Streptococcus faecalis, aminoglycoside antibiotics antibiotic resistance 3291.
 systems, Rhodospseudomonas sphaeroides uroporphyrinogen biosynthesis 9206.
 Trichoderma reesei, cellulose hydrolysis 1056.
 use, production, bakery products, beverages, USSR 6677.
 Vigna sinensis, tobacco necrosis virus infection, osmotic stress effects on 413.
 viruses, antiviral agents interaction, activity mechanisms 9695.

Eperua falcata,

leaves decomposition, soil microorganisms, forests 1439.

Ephebia oryzae,

infection, Oryza sativa, chemical control 3149.

Ephestia caudata,

pest control, captan, compatibility, Bacillus thuringiensis, stored products 7495.

pest control, captan, compatibility, Bacillus thuringiensis, stored products 8351.

Epilochloa typhina,

use, acetylcholine, N-formylcholine, accumulation, Festuca arundinacea 7499.

Epilochloa,

Larix defoliation, association Adelges grazing 540.

Epilochloa purpurascens,

microflora, Hordeum, fungicides treatment effects on 7766.

Epidemiology,

Alternaria brassicicola infection, Brassica oleracea seeds 1229.

black rot, Cylindrodium rotaleanae, soil inoculum, spatial distribution, Arachis hypogaea 1123.

Cucumis stem height, relationship, powdery mildew, pest attack 1248.

Dutch elm disease, microorganisms, Ulmus glabra, Scolytus vectors 1453.

ergot, Gramineae 1151.

Fusarium moniliforme var. subglutinans, pitch canker, Pinus taeda 1467.

gummosis, Pinus persicae 1214.

Hemileia vastatrix, leaf rust, Coffea arabica, Latin America 1216.

leaf rust, Puccinia recondita, Triticum aestivum 370.

leprosy, Mycobacterium leprae, immunoassays, man 846.

leprosy, radioimmunoassay, man 848.

Norwalk agent infection, man, disease transmission, association swimming 1710.

Norwalk agent infection, man, gastroenteritis, association swimming 1709.

Peronosclerospora, Sclerospora graminicola, downy mildew, Zea mays, Sorghum vulgare, Pennisetum typhoides, reviews 1186.

Phytophthora infestans, bright, inoculum potential, Solanum tuberosum 424.

pitch canker, Pinus taeda seeds 543.

Pseudocercospora leprothoides infection, Hordeum, seasonal variations 115.

Quercus wilt, disease spread 1462.

relationship, metabolism, blast, Phyllosticta oryzae, Oryza sativa 1182.

Epidermophyton floccosum,

antifungal activity, substituted phenols, structure-activity relationships 3338.

Epilachna varivestita,

feeding, requilgration, disease transmission, southern bean mosaic virus, Phaseolus vulgaris 6738.

Epilachna curvata,

leafspot, Myrothecium roridum 5747.

Epithelium,

nasopharynx, cell culture methodology, association Epstein-Barr virus 8095.

Eptilrix,

biological control, Beauveria toxins, toxicity 1106.

eggs, larvae, biological control, spores, Beauveria 985.

Epoxidation,

alkanes, alkenes, methylotrophic bacteria 4761.

alkenes, methane monooxygenase, formate dehydrogenase role, generation NAD

Methylotinus 6474.

oxidation, (continued)

propylene, metabolism, *Brevibacterium*, *Pseudomonas fluorescens*, *Nocardia* 7462.

oxides,

production, association, hydrocarbons conversion, *Pseudomonas oleovorans* 9631.

production, *Flavobacterium* 2840.

oxyagroclavine-1,

Penicillium coryophillum, biosynthesis 1973.

pesteil-Barr virus,

antiviral activity, ara-A, erythro-9-(2-hydroxy-3-nonyl)adenine, lymphoblastoid cell lines 5067.

glycoproteins purification, cell culture 9105.

9-(2-hydroxyethoxy)methylguanine antiviral activity 9697.

nosapharynx epithelium cell culture methodology, association 8095.

replication, antiviral activity, nucleosides analogs 9688.

quine infectious anemia virus,

antibodies, indirect fluorescent antibody test detection, methodology 6290.

quine infectious arteritis virus,

vacuoles stability 8052.

quipment,

enumeration, bacteria, food contamination 3575.

enzyme-linked immunosorbent assay, cleaning systems 1764.

heat transfer, fouling organisms, bacteria, books 5444.

safety, laminar air flow, bacteria assays 5332.

quileum,

vesicular-arbuscular mycorrhizas, morphology 2327.

radication,

Barberis vulgaris, USA, disease control, *Triticum* stem rust pathogens 1389.

potato virus Y, potato virus Y, infection, *Solanum tuberosum*, heat treatments, meristem tip culture use 2155.

potato virus X, *Solanum tuberosum* cultivars, use, ribavirin 1239.

remethocloe ophiuroides,

pathogenicity, *Rhizoctonia zeae* 5701.

remethocloe ashbyi,

Helianthus annuus sesquiterpene lactones antimicrobial activity 7953.

remethocloe ashbyi,

monoterpenes biosynthesis 2385.

rgoeline,

biosynthesis, thiazolidine-4-carboxylic acid incorporation 1032.

rgosterol,

Alternaria, *Fusarium*, infection, *Sorghum vulgare*, pathology, *Sorghum vulgare* 5720.

biosynthesis, inhibition, fungicides, association *Sphaerotheca fuliginea* sensitivity 9487.

Saccharomyces cerevisiae, biosynthesis defective mutant, relationship sterols production 9187.

Ustilago maydis, biosynthesis, fungicides inhibition 1595.

rgot,

alkaloids, biosynthesis, β -naphthylalanine induction, *Claviceps* 6590.

alkaloids, biosynthesis, *Claviceps purpurea* 5557.

alkaloids, *Claviceps purpurea*, biosynthesis, association, morphology 3867.

Claviceps fusiformis, *Penicillium typhoidum*, incidence, relationship planting time 5712.

Claviceps purpurea, food poisoning, reviews, man 1074.

Gramineae, epidemiology 1151.

reviews 5560.

biosynthesis, *Claviceps purpurea* defective mutant 7508.

Claviceps purpurea, production, structure 6594.

production, *Claviceps*, biotin effects on 4914.

rica carnea,

roots, endomycorrhizas infection, ultrastructure, morphology 9504.

ricineae,

mycorrhizas, ecophysiology, nutrient transport, absorption, nitrogen sources, phosphate 9538.

ricin,

mycorrhizas, ecophysiology, nutrient transport, absorption, nitrogen sources, phosphate 9538.

rigeron bonariensis,

plant extracts antifungal activity, storage fungi 7934.

riolion,

slope exposure relationship, grasses cover, soil biochemical characteristics, microorganisms activity 7826.

rysiphe graminis f.sp.tritici,

infection, disease resistance, genes, *Triticum aestivum*, cell walls chemical composition association 9476.

rwilia,

bacteriopsis biosynthesis induction, U.V. radiation, mitomycin C 760.

black leg, *Solanum tuberosum*, characterization 2153.

canker, *Carica papaya*, symptoms, *Acetonia fulva* vectors, Mariana Islands 1222.

glucose fermentation, 2-keto-L-gulononic acid production 928.

plant diseases, roots, crops, greenhouses, USA, North Carolina 9411.

plants pathogens, preservation, gels + cold storage 2688.

root rot, disease resistance, plant breeding, Beta 1376.

soft rot, tubers, *Solanum tuberosum* 6809.

strains, proteins, gel electrophoresis 3582.

rwilia amylovera,

amylovorin, host specificity, *Cotoneaster pannosa*, spiraea vanhouttei, *Malus pumila* 9371.

fireblight, bactericides, disease control, *Pyrus* 1207.

fireblight, buds, *Malus pumila* 1225.

fireblight, disease control, fungicides, screening, seedlings, *Malus pumila* 1406.

isolation, *Rosaceae*, characterization 419.

rwilia asetroptica,

polygalacturonase isoenzymes characterization 6547.

rwilia carotovora,

disease spread, rhizosphere, roots, *Cucumis sativus* 4997.

phosphorylase enzymes, soft rot, oxygen effects on, potatoes 5033.

+ *Plasmodium ostreatus*, culture, effects on, nutritive value, *Triticum aestivum*, straw, *Ruminantia* 254.

Rhizobacterium, inoculation, effects on, infectivity, *Solanum tuberosum* 3061.

rwilia carotovora subsp. atrovora,

black leg, interaction, *Fusarium*, *Verticillium dahliae*, wilt, effects on, *Solanum tuberosum* 1251.

post-harvest decay, potatoes 2235.

soft rot, tubers, *Solanum tuberosum* 5752.

rwilia carotovora subsp. carotovora,

black leg, interaction, *Fusarium*, *Verticillium dahliae*, wilt, effects on, *Solanum tuberosum* 1251.

carotovonin effects on, macromolecules, biosynthesis, nutrient transport, ATP 2589.

Lycopersicon esculentum post-harvest decay, temperature, suspensions depth effects on 1330.

post-harvest decay, potatoes 2235.

rot, temperature, wound healing, susceptibility, *Solanum tuberosum* 3062.

soft rot, pathogenicity, storage, culture collections 2229.

soft rot, pathology, *Lactuca sativa* 9384.

soft rot, tubers, *Solanum tuberosum* 5752.

rwilia carotovora var. chrysanthemi,

Zea mays stalk rot, fertilizer applications effects on 1197.

rwilia chrysanthemi,

biotyping, pathogenicity, *Zea mays*, ornamental plants 4927.

inoculation methodology, ornamental plants, greenhouses 2229.

leaf blight, nitrogen sources effects on, *Philodendron sellowii* 1298.

pectate lyase biosynthesis, water activity relationship 9185.

post-harvest decay, *Solanum tuberosum*, storage effects on disease resistance 7721.

rot, disease resistance, *Solanum tuberosum* subsp. *andigena* 3132.

stalk rot, *Zea mays*, symptoms, pathogenicity 2140.

rwilia chrysanthemi pv. zeae,

stalk rot, top rot, *Zea mays*, Brazil, new records 2141.

rwilia herbicola,

biological control, bacteria, ice, nuclei, activation, cryoinjury, *Zea mays* 8643.

inhibition, *Pseudomonas syringae*, ice nuclei activation, biological control, cryoinjury, *Zea mays* 8642.

smoke, effects on, ice nuclei formation, activity 8527.

rwilia salicis,

antigens detection, enzyme-linked immunosorbent assay, Watermark disease, *Salix alba* 6919.

rwilia stewartii,

media (selective) 9053.

wilt, disease resistance, plant breeding, *Zea mays* 1346.

rwilia neophidias,

biological control, conidia, spores, survival, environmental conditions, *Insecta* 1009.

conidia, biological control, *Aphididae* 8361.

rwilia phytonomi,

biological control, *Hypera postica*, kocide effects on 7485.

rysipheolothrix rhusopathiae,

serotyping 6329.

serotyping 6330.

rysiphe,

leafspot, *Medicago sativa* 5670.

rysiphe clitoracearum,

amino acids, amidation, antifungal activity 2478.

antifungal activity, pyrazoles derivatives 6875.

downy mildew, *Helianthus annuus* 4006.

powdery mildew disease control, greenhouses plants, ectaconazole treatment 5004.

powdery mildew, disease resistance, *Helianthus* 1278.

powdery mildew disease resistance, plant breeding, *Zinnia elegans* × *Zinnia angustifolia* interspecific hybridization 7729.

powdery mildew, *Leguminosae*, epidemiology 8536.

powdery mildew, *Vitis vinifera*, *Cucumis sativus*, *Triticum*, disease resistance, cultural conditions 2250.

white mold, disease resistance, *Nicotiana tabacum* 4091.

white mold, *Nicotiana tabacum*, disease resistance 4074.

rysiphe graminis,

amino acids, amidation, antifungal activity 2478.

antifungal activity, pyrazoles derivatives 6875.

infection, *Hordeum*, pathogenicity, association, tridormorph treatment 485.

infection, roots, *Hordeum vulgare* 355.

mildew, disease resistance, relationship, cytokinins levels, grain, *Triticum aestivum*, *Hordeum vulgare* 2249.

plant diseases, *Triticum*, disease control, fungicides 5830.

powdery mildew, calcium nitrate, potassium phosphate, effects on, disease resistance, *Triticum aestivum*, *Hordeum vulgare* 378.

powdery mildew, disease resistance, genes, *Triticum aestivum* 2256.

powdery mildew, disease resistance, genetic analysis, *Hordeum* 8627.

powdery mildew, *Hordeum*, disease resistance, genetic analysis 471.

powdery mildew, shading, effects on *Gramineae* senescence 3956.

powdery mildew, *Triticum*, *Hordeum*, treatment, drug resistance 2126.

powdery mildew, *Vitis vinifera*, *Cucumis sativus*, *Triticum*, disease resistance, cultural conditions 2250.

sporulation, samplers 4518.

rysiphe graminis f.sp. hordei,

antifungal activity, triadimenol diastereoisomers 693.

haustoria growth, *Hordeum vulgare* 9347.

Hordeum infection, disease resistance association leaves developmental stages 463.

Hordeum vulgare powdery mildew, spores dispersal, spring, Denmark 2127.

infection, Denmark, conidia dispersal, Denmark 2128.

infection, *Hordeum vulgare*, disease resistance, association, Mi-a locus 8611.

infection, *Hordeum vulgare*, disease resistance, genetic control 6840.

infection *Hordeum vulgare*, pathogenesis, morphology association 4957.

powdery mildew, defense mechanisms, *Hordeum vulgare* 6836.

powdery mildew, disease resistance, estradiol, proteins, *Hordeum vulgare* 4060.

powdery mildew, disease resistance, *Hordeum vulgare* varieties, mechanisms 4089.

powdery mildew, disease resistance induction, *Erysiphe graminis* f.sp. *hordei* incompatibility races, *Hordeum vulgare* 1362.

powdery mildew, fungicides disease control, *Hordeum vulgare* 9489.

powdery mildew, *Hordeum*, disease resistance 482.

powdery mildew, *Hordeum vulgare* disease resistance, association, age, growth rate, carbohydrate composition, amino acid composition 6857.

powdery mildew, *Hordeum vulgare*, pathogenicity, microscopy, X-ray diffraction 6775.

powdery mildew, *Hordeum vulgare*, simulations 8554.

powdery mildew, penetration, cotyledon, *Hordeum vulgare* 3947.

powdery mildew, translocation, roots growth, water stress, *Hordeum vulgare* 3935.

powdery mildew, *Triticum*, *Hordeum*, treatment, drug resistance 2126.

powdery mildew, virulence gene frequency, *Hordeum vulgare* 5041.

powdery mildew, virulence selection, disease resistance genes, *Hordeum vulgare* 8550.

Erysiphe graminis f.sp.hordei, (continued)

spores, counting methods, spectrophotometry, I.R. radiation 3634.
 isomorph effects on 4128.
 virulence, disease resistance, genetic analysis, *Hordeum vulgare* 8607.

Erysiphe graminis f.sp.tritici,

infection, *Triticum aestivum*, disease resistance, screening 1347.
 peptide mapping 925.
 powdery mildew, disease resistance, *Triticum aestivum* 2263.
 powdery mildew, mutants, virulence, genetic analysis, *Triticum aestivum* 356.
 powdery mildew, *Triticum aestivum*, disease control, triadimenol 1422.
 powdery mildew, *Triticum aestivum*, disease resistance inheritance 9464.
 powdery mildew, *Triticum*, *Hordeum*, treatment, drug resistance 2126.

Erysiphe pisi,

inoculation methodology, *Pisum sativum* 9336.
 phospholipase, purification, activity 6541.

Erysiphe polygoni,

powdery mildew, disease resistance, *Lupinus* 9467.

Erysiphe polygoni,

powdery mildew, disease control, fungicides, *coriandrum sativum* 493.
 powdery mildew disease control, greenhouses plants, ectaconazole treatment 5004.
 powdery mildew, disease resistance, genetic analysis, *Beta vulgaris* 4096.
 powdery mildew, pathogenicity, *Brassica napus* mixtures effects on 4043.
 powdery mildew, *Pisum sativum*, antifungal agents, disease control 8637.
 powdery mildew, *Pisum sativum*, sulfur fungicides, disease control 4123.
 powdery mildew, sulfur foliar applications, disease control, *Beta vulgaris* 5823.

Erythro-3-(2-hydroxy-3-nonyl)adenine,

antiviral activity, Epstein-Barr virus, lymphoblastoid cell lines 6067.

Erythrocytes,

Anaplasma marginale infected, proteins characterization 6379.
 hemolysis, influenza A virus antigens detection, factors affecting 824.
 sheep, cell culture secretions, antibacterial activity 6049.
 stabilization, methodology, hemagglutination, hemagglutination inhibition, viruses 5371.

Erythromycin,

antibacterial activity, *Campylobacter fetus* subsp.jejuni, *Campylobacter fetus* subsp.intestinalis 8863.
 antibacterial activity, carbon dioxide effects on 3420.
 antibacterial activity, diphtheroids 7977.
 antibacterial activity, *Haemophilus influenzae*, *Streptococcus pneumoniae* 7985.
 antibacterial activity, *Legionella pneumophila* 9738.
 antibacterial activity, pharmacokinetics, side effects 5172.
 antibacterial activity relationship serum binding 2562.
 antibacterial activity, *Staphylococcus*, clinical isolates 8804.
 antibiotic resistance, *Propionibacterium*, clinical isolates, acne 8736.
 antibiotic resistance, *Staphylococcus aureus* 3290.
 antibiotic resistance, *Staphylococcus aureus* 3646.
 antibiotic resistance, transfer, *Clostridium difficile* 6011.
 antibiotic sensitivity testing, *Clostridium perfringens* 4336.
 antibiotic sensitivity testing, streptococcus 9718.
 bacteria urinary tract isolates, antibiotic sensitivity testing, antibiotic resistance 4287.
Bacteroides fragilis antibiotic sensitivity testing 7130.
Bordetella pertussis, drug sensitivity testing 7133.
Campylobacter fetus subsp.jejuni drug sensitivity testing 4292.
 effects on, *Bordetella pertussis* ultrastructure 1599.
 effects on *Escherichia coli* aminocycl-IRNA hydrolase, dissociation, ribosomes 630.
 inhibition sporulation, *Saccharomyces*, *Kluyveromyces* 1631.
Neisseria gonorrhoeae antibiotic sensitivity testing 3382.
 +polymyxin, media (isolation), *Yersinia pestis* 1787.
 resistance, yeasts, mitochondria, rRNA 21S genes 1526.
 rosamycin, tetracycline, spectinomycin, antibiotic sensitivity testing comparison, *Mycoplasma pneumoniae* 6082.
Streptococcus clinical isolates, antibiotic sensitivity testing 6112.
 sensitivity, *Streptococcus* animal isolates 5193.
Staphylococcus clinical isolates, susceptibility 3281.
Streptomyces erythraeus antibiotic resistance, association adenine dimethylation 638.
Streptomyces erythraeus, production, propanol requirements 6171.
Streptomyces erythraeus, liquid culture, effects on 8005.
Yersinia pestis antibiotic sensitivity testing 6110.

Erythromycin A,

alanine peptides, binding, antibacterial activity 1632.
 biosynthesis, *Streptomyces erythraeus*, erythronolide A glycosylation 6168.

Erythronolide A,

glycosylation, biosynthesis erythromycin A, *Streptomyces erythraeus* 6168.

Erythronolide B,

conversion, macrolide antibiotics 6167.

Escherichia,

hexachlorophene drug resistance, conjugation, R factors 6030.
 nitridazole antibiotic activity 3328.

Escherichia coli,

acyl-CoA carboxylase biotin binding sites, peptide synthesis, interaction, magnesium, N.M.R. 4632.
 Achatina fulica, mucus, antibacterial activity 5185.
 acyl carrier protein, purification, immunoadsorption chromatography 8193.
 acyl-(acyl-carrier-protein) synthetase, purification, characterization 8246.
 adenosinetriphosphatase, β -subunit, phosphate binding sites.
 4-azido-2-nitrophenylphosphate photoaffinity labeling 4687.
 adenosinetriphosphatase bioluminescence assays, blood culture, use, bacteremia diagnosis 8125.
 adenylate cyclase deletion mutant, transduction methodology 5401.
 adherence, plastics 3492.
 aerosols, dispersion, screening, methodology 7237.
 alkaline phosphatase biosynthesis, relationship structure, biochemical characteristics 8294.
 alkaline phosphatase subunit association, formamide effects on, role metals 2770.
 alkaline phosphatase, use enantiomers separation, alcohols derivatives 8289.
 alkyl dimethylbenzyl ammonium chloride, effects on, cytoplasmic membranes, ribosomes 5184.
 aminacin resistance, transposon Tn2424 mediation 7899.
 amino acids production, whey 3855.
 aminocycl-IRNA hydrolase, dissociation, ribosomes, erythromycin, carbomycin, spiramycin, effects on 1630.
 aminoglycoside antibiotics, effects on, protein biosynthesis, RNA biosynthesis 6094.

Escherichia coli, (continued)

ampicillin susceptibility, antibiotics pretreatment 7061.
 anaesthetics antibacterial activity 7926
 analysis, water springs 9815.
 anilazine, effects on, growth, respiration, enzymatic activity 5168.
 aniline derivatives conversion, diazonium salts biosynthesis 3741.
 animal isolates, antibiotic resistance, antibiotic sensitivity testing, surveys 634.
 animal isolates, antibiotic resistance, surveys 3287.
 animal isolates, colicin V production 3431.
 antibacterial activity, *Chromobacterium violaceum* antibiotic Y-T0678H 9768.
 antibacterial activity, β -hydroxycholesters derivatives 8752.
 antibacterial activity, β -lactam antibiotics 739.
 antibacterial activity, β -lactam antibiotics 4330.
 antibacterial activity, β -lysin, association outer membranes 3316.
 antibacterial activity, aminocycl-cabazole derivatives 3330.
 antibacterial activity, aminoglycoside antibiotics + cephalosporins, antibiotic synergism 736.
 antibacterial activity, anesthetics, structure-activity relationships 6051.
 antibacterial activity, antibiotic synergism, clavulanic acid, ticarcillin 6147.
 antibacterial activity, antibiotic synergism, semisynthetic penicillins, aminoglycoside antibiotics 7125.
 antibacterial activity, antibiotics + ethionium 1558.
 antibacterial activity, antimicrobial agents combination, dose-response effects 7920.
 antibacterial activity, bicyclomycin 2595.
 antibacterial activity, carbazole derivatives 7961.
 antibacterial activity, cefaclor, cefadroxil 731.
 antibacterial activity, cefotetan, role β -lactamase 4370.
 antibacterial activity, Cephalosporins derivatives, structure-activity relationships 8840.
 antibacterial activity, derivatives, kanamycin, dibekacin, ribostamycin 8853.
 antibacterial activity, EDTA + tromethamine + antimicrobial agents 8765.
 antibacterial activity, fosfomycin 7184.
 antibacterial activity, mecillinam + nocardin A, cytotoxicity, inhibition protein biosynthesis 2555.
 antibacterial activity, mezlocillin, azlocillin, + cephalosporins 6148.
 antibacterial activity, mezlocillin, comparison, penicillins 6141.
 antibacterial activity, N,N'-bis(alkylmethyl)-1,2-ethanediamine dioxides, N,N'-bis(alkylmethyl)-1,2-propanediamine dioxides, structure-activity relationships 7954.
 antibacterial activity, N,N'-bis(decylmethyl)- α , ω -alkanediamine dioxides 7116.
 antibacterial activity, norfloxacin 7062.
 antibacterial activity, pharmacokinetics 8753.
 antibacterial activity, phenolic structure-activity relationships 8758.
 antibacterial activity, polyethylene glycol 8774.
 antibacterial activity, sorbic acid, pH 7065.
 antibacterial activity, *Streptococcus* mutants bacteriocins 8025.
 antibacterial activity, synthetic grastin 8864.
 antibacterial activity, temocillin 5254.
 antibacterial activity, 1-aryl-3-(3-nitro-4'-methoxyphenyl)-5-phenyl formazan, 3-aryl-5-(3-nitro-4'-methoxyphenyl)-2-phenyl tetrazolium bromide 6082.
 antibacterial activity, 3-aryl-2-arylimino-4,5-disubstituted- Δ^4 -thiazolones 4318.
 antibacterial activity, 5-fluorouracil derivatives 9663.
 antibacterial agents stress injury, growth delay analysis 9033.
 antibiotic L-640,876 antibacterial activity 4426.
 antibiotic L-640,876 antibacterial activity, mechanisms, membrane permeability 4409.
 antibiotic resistance, β -lactam antibiotics, role membrane permeability, porins 1542.
 antibiotic resistance, ampicillin, cephalothin, relationship β -lactamase activity 7028.
 antibiotic resistance, chloramphenicol, analogs, R factor R26, R factor R55-1 654.
 antibiotic resistance, clinical isolates 1524.
 antibiotic resistance, clinical isolates 5153.
 antibiotic resistance development 6020.
 antibiotic resistance enhancement mechanisms, genetic analysis 7894.
 antibiotic resistance, identification, contamination 8728.
 antibiotic resistance, milk isolates 4779.
 antibiotic resistance, plasmids, genetic control 2394.
 antibiotic resistance, population studies 629.
 antibiotic resistance, R factors, animal isolates, chickens 7043.
 antibiotic resistance, role, plasmids 6017.
 antibiotic resistance, septicemia, man 645.
 antibiotic sensitivity testing 2393.
 antibiotic sensitivity testing 6111.
 antibiotic sensitivity testing 9726.
 antibiotic sensitivity testing, animal isolates, chickens 4333.
 antibiotic sensitivity testing, ceftazidime, agar diffusion test 4371.
 antibiotic sensitivity testing, cephalosporins 2449.
 antibiotic sensitivity testing, nosocomial infection, man 6098.
 antibiotic SM-1652 antibacterial activity 734.
 antibiotic T-1982 antibacterial activity 735.
 antibiotics sensitization, role polymyxin B 7158.
 antigen K12 structure 5534.
 antimicrobial activity, *Acorus calamus* essential oils, sophora extracts 2495.
 antimicrobial activity, alkylpyridinium iodides 1587.
 antimicrobial activity, butylated hydroxyanisole, t-butylated hydroxyquinone, propyl gallate 4319.
 antimicrobial activity, O,O-dialkylthiophosphoric acid, derivatives 7955.
 antimicrobial agents susceptibility, statistical analysis methodology 1795.
 apicalin antibacterial activity 2556.
 aspartate ammonia-lyase, L-alanine production 927.
 aspartate carbamoyltransferase catalytic subunits, amino acid sequence 6562.
 aspartate carbamoyltransferase, ultrastructure, crystal structure 23.
 aspartate kinase, potassium, ammonium, sodium, lithium activation 6536.
 ATP, CTP interaction, aspartate carbamoyltransferase 1906.
 aztreonam antibacterial activity 777.
 bactericidal activity, cefadroxil, cephalixin 7137.
 bacteriolysin biosynthesis 838.
Bacteroides fragilis, metronidazole antibacterial activity, pure culture, mixed culture 2447.

Escherichia coli, (continued)

acteroides, mixed culture, antibacterial activity, cefotaxime, metronidazole 7999
 bioassays, acetyl-CoA, aminoglycoside antibiotics purification 3415.
 biodegradation, methylmercury 196.
 bioreactors, media (culture), aeration, reviews 8084.
 biosynthesis, association sulfur 2843.
 bioluminescence, antibacterial activity, interaction radiosenesivity 7915.
 capsules 3-deoxy-D-manno-octulosonic acid containing polysaccharides, structure characterization 53.
 carboxymethylhydroxybutyryl semialdehyde dehydrogenase, purification, characterization 53.
 casein biodegradation 2020.
 cefotaxime, antibacterial activity 7142.
 cefotaxime, moxalactam, antibacterial activity comparison, antimicrobial agents 6126.
 cefotetan antibacterial activity 5198.
 cefotetan inactivation β -lactamase 4368.
 cefuroxim, antibacterial activity 1812.
 cefuroxime antibacterial activity 6130.
 cell adhesion, polystyrene substrates, measuring techniques, use, bioluminescence 4489.
 cell cycle analysis methodology, relationship, growth rate 3559.
 cell disruption, methodology glass beads 6337.
 cell division, association, growth, murein biosynthesis, cross-linking 1984.
 cell division temperature-sensitive mutant, penicillins effects on inorganic pyrophosphatase levels 8000.
 cell injury, association, novobiocin, coumestrol 5280.
 cell membranes, D-amino-acid dehydrogenase, solubilization, kinetics 4694.
 cell suspensions, β -adrenergic blocking agents effects on turbidity 2443.
 cerebrospinal fluid, clinical isolates, antibiotic resistance 7904.
 characterization, scanning electron microscopy optical properties 858.
 chloramphenicol acetyltransferase, role, fusidic acid drug resistance 7907.
 chlorhexidine, noxythiolin, phenoxymethanol, antibacterial activity 6040.
 chorismate mutase sites, prephenate dehydrogenase localization 5487.
 chromatium, isolation methodology, characterization 3620.
 citrate (si)-synthase, purification, characterization 4662.
 citrate synthase production, genetic engineering 2786.
 clinical isolates, antibacterial activity, cephalosporins 3740.
 clinical isolates, antibacterial activity, sisomicin 3425.
 clinical isolates, antibiotic sensitivity testing 726.
 clinical isolates, antibiotic sensitivity testing 7132.
 clinical isolates, British Isles, drug resistance 1540.
 clinical isolates, hospital, drug resistance, mercury 662.
 colicin M effects on murein biosynthesis 2465.
 colicins production, proteolytic enzymes biodegradation association 4397.
 comparison, Haemophilus influenzae, chloramphenicol, bacterial activity, cell cycle 5259.
 compound 48/80 antimicrobial activity, mechanisms, association, cell membranes 5225.
 conalbumin antibacterial activity, microflora 5181.
 contamination, mineral water, bacteria 2027.
 contamination, poultry, counting methods, factors affecting 190.
 contamination, rivers, Yugoslavia 2620.
 coupling factor 1 β -subunit, N-ethoxycarbonyl-2-ethoxy-1,2-dihydroquinoline chemical modification 8268.
 cross-resistance, nitrofurans, aminoglycoside antibiotics 7045.
 CTP synthetase, purification, kinetics 7384.
 cultivation, growth conditions bioreactors 9571.
 cultivation, growth conditions bioreactors 9573.
 cyclopropane fatty-acid synthetase, purification, characterization 8218.
 cytidine deaminase, pyrimidine nucleoside phosphorus analogs inhibition 69.
 cytochrome c, cytochrome b, characterization 3658.
 cytotryptone membranes damage, polyhexamethylene biguanides, structure-activity relationships 7063.
 cytotoxins biosynthesis, relationship, Shigella dysenteriae 2962.
 Daphnia magna cell-free system, cytolytic activity 5170.
 daunorubicin, adriamycin, antibacterial activity, structure-activity relationships 4404.
 dental cement-chlorhexidine gluconate antibacterial activity 677.
 detection methodology, aquatic environment 2667.
 detection methodology, muramic acid, diaminopimelic acid, alanine enantiomers ratio, gas chromatography 7240.
 diarrheal isolates, antibiotic resistance, cattle, juveniles 1534.
 diauxic growth, DNA biosynthesis, RNA biosynthesis, protein biosynthesis 8215.
 2,4-dienoyl-CoA reductase, purification, characterization 1894.
 distilled water antibacterial activity, chlorine residual effects 2462.
 distillation, feeds, radiation disinfection 7605.
 DNA biosynthesis, RNA biosynthesis, protein biosynthesis, parabens, effects on 7120.
 DNA, flow cytometry, methodology, clinical microbiology 6339.
 DNA polymerase I, genetic engineering, purification 7424.
 DNA polymerase I, structure, electron microscopy 6535.
 DNA-binding protein purification, dnaA gene 1844.
 diphthacin B1 bacterial activity, association, DNA physicochemical properties 775.
 DNA(guanosine-6'-methyltransferase, measuring techniques 868.
 drinking water isolates, antibiotic resistance 3480.
 drug resistance, intestinal microflora, juveniles, chickens 2411.
 drug sensitivity testing, chlorine dioxide, relationship, growth conditions 667.
 electric currents, hydrogen peroxide formation, phosphates buffers, cytotoxicity 2424.
 elongation factor G C-terminus, crystallization 2738.
 elongation factor Ts, interaction elongation factor Tu, Bacillus stearothermophilus 3641.
 elongation factor Tu, amino acid sequence, comparison elongation factor 1 α -chain, Artemia salina 4573.
 elongation factor Tu, N-tyl-L-phenylalanylchloromethane chemical modification amino acid residues 1836.
 elongation factor Tu, purification, characterization 1835.
 endoxenonucleoside, purification, cleavage superhelical DNA 4691.
 endotoxins, association prostaglandins, characterization 8515.
 enoyl-CoA hydratase, purification, characterization 8243.
 enteritis, clinical isolates incidence, antibiotic resistance, man 8733.
 enterohemorrhagic, scandium, indium, complex, antibacterial activity 1554.
 enterotoxins, agglutination detection 9305.
 enterotoxins, agglutination measuring techniques 9302.

Escherichia coli, (continued)

enterotoxins, amino acid sequence 4915.
 enterotoxins, amino acid sequence 6721.
 enterotoxins, amino acid sequence 6722.
 enterotoxins, antigenic determinants 6714.
 enterotoxins, assays, Vero cells, rabbits, ileum 310.
 enterotoxins biosynthesis, drug resistance, antibiotic resistance, animal isolates 665.
 enterotoxins biosynthesis, media (culture) methodology 9299.
 enterotoxins biosynthesis, media (culture) methodology, conferences 9881.
 enterotoxins biosynthesis, plasmids role, association eukaryotes adenylate cyclase activation 7642.
 enterotoxins characterization, use, immunodiffusion, neutralization 7634.
 enterotoxins, chemical properties 9313.
 enterotoxins components biosynthesis 2088.
 enterotoxins detection, agglutination 9311.
 enterotoxins, detection, enzyme-linked immunosorbent assay, methodology 9969.
 enterotoxins, detection, hybridization analysis, enzyme-linked immunosorbent assay 4903.
 enterotoxins, enzyme-linked immunosorbent assay 9304.
 enterotoxins, enzyme-linked immunosorbent assay, sonication 2961.
 enterotoxins, enzyme-linked immunosorbent assay 9310.
 enterotoxins, food poisoning, man, reviews 1104.
 enterotoxins, heat activation 3894.
 enterotoxins, methodology detection 6729.
 enterotoxins, neutralization 2957.
 enterotoxins, peptides, synthesis, biological properties 2086.
 enterotoxins, physicochemical characteristics 3887.
 enterotoxins production, milk 1111.
 enterotoxins, purification 5656.
 enterotoxins, purification, amino acid sequence 2955.
 enterotoxins, purification, characterization 292.
 enterotoxins, purification, characterization 5657.
 enterotoxins, purification, gel electrophoresis 290.
 enterotoxins purification, physicochemical properties, amino acid sequence, relationship pathogenicity 4910.
 enterotoxins, radioimmunoassay 9294.
 enterotoxins, subunit structure, immunochromatography, 291.
 enumeration, meat products 1083.
 enumeration, sea water, media comparison 9956.
 ethylene glycol utilization, metabolic pathways 2010.
 R factors, antibiotic resistance transfer, wastewater treatment 1548.
 R factors, drug resistance, isolates, man, cattle, chickens, pigs 7039.
 factumycin antibacterial activity 3436.
 fatty acid composition, antibiotic AL-37 effects on 8895.
 fecal microflora isolates, drug resistance, Netherlands 7033.
 fensulfothion biodegradation 7538.
 food contamination, beef, pork, temperature effects on 241.
 food contamination, cheese production, factors affecting survival 4856.
 food contamination, enumeration equipment 3575.
 food contamination, isolation methodology, effects on pathogenicity, man 177.
 food contamination, role, disease transmission, diarrhea, children, Bangladesh 4847.
 formate dehydrogenase (cytochrome), purification, characterization 4651.
 N-formimidoyl thienamycin, antibacterial activity 3430.
 galactose-binding protein, maltose-binding protein, ligands binding 2734.
 β -D-galactosidase active sites, β -D-galactosylamines detection 8250.
 β -D-galactosidase, photolabeling 7421.
 β -D-galactosidase polyelectrolytes complex, effects on kinetics 8256.
 β -D-galactosidase, purification methodology 7325.
 β -D-galactosidase, substrate specificity 6493.
 β -D-galactosidase, use, labelling, enzyme immunoassay, S-100 protein measuring techniques, cerebrospinal fluid, man 857.
 gastrointestinal tract clinical isolates, norfloxacin antibacterial activity 2455.
 gene transfer, antibiotic resistance, enterotoxins plasmids 3299.
 genetic engineering, secretin biosynthesis 1970.
 gentamicin bacterial activity 4387.
 α -glucan phosphorylase mechanisms 1888.
 glucose fermentation, heat production association, measuring techniques 1052.
 glutamate decarboxylase, γ -aminobutyric acid formation, mechanisms, stereospecificity 6563.
 glutamate decarboxylase, immobilized enzymes preparation, characterization 1855.
 glutamate decarboxylase, purification, kinetics 5486.
 glutamate synthase (NADPH), chemical modification, phenylglyoxal, pyridoxal 5'-phosphate, binding NADP, α -ketoglutaric acid 5488.
 glycerophosphate acyltransferase, purification, characterization 8229.
 glycerophosphate phosphatidyltransferase, purification, characterization 8230.
 growth curves, association, exposure, ampicillin, amoxicillin 7054.
 growth, sugar inhibition, association, wound infection treatment, man, in vitro 7056.
 heat balance, in vitro, calorimetry + fermenters measuring techniques 7215.
 histamine biosynthesis, food poisoning 121.
 histology stains, scanning electron microscopy 866.
 host range, carboxid drug resistance, R factors host range 7038.
 6-hydroxy-L-nicotinamide, 6-hydroxy-D-nicotinamide assays 6531.
 3-hydroxyacyl-CoA dehydrogenase, isolation, substrate specificity 4589.
 β -hydroxydecanoyl thioester dehydratase, purification, characterization 54.
 immobilized cells, glutathione production 118.
 immobilized cells, L-aspartic acid biosynthesis 2745.
 immobilized cells, L-aspartic acid biosynthesis, enzyme activity 4579.
 immobilized cells, NADP⁺ recycling, glucose-6-phosphate dehydrogenase 4672.
 immobilized cells, production, L-tryptophan, L-serine 9126.
 immobilized cells, tyrimidine phosphorylase, activity 3694.
 indicator species, association, drinking water, waste water, water sources 797.
 indicator species, glutathione water microbial pollution 8979.
 indicator species, vegetables, freezing effects on 6668.
 infection, antibiotic resistance, juveniles, cattle 643.
 infection, man, diagnosis, association, food contamination 2054.
 iron superoxide dismutase, quaternary structure, X-ray crystallography 6537.
 iron uptake, role, streptogramin bactericidal activity 1679.
 isolates, antibiotic resistance, cefuroxime 7893.
 isolates, hospitals, antibiotic resistance 8732.
 isolates, man, cattle, toxins production 1112.
 isolation, diarrhea, neonates, cattle, antibiotic sensitivity testing 3283.
 isolation, juveniles cattle, feeding, milk substitutes, antibiotic sensitivity

Escherichia coli, (continued)

- testing 8742.
isolation, milk, meat 3826
isocoulyl-tRNA synthetase activation isoleucine activity, role ATP 4596.
 α -ketoglutarate dehydrogenase multienzyme complexes, self-association, light scattering 8269.
 β -lactam antibiotics + antineoplastic drugs synergism, antibacterial activity 3385.
 β -lactam antibiotics diffusion, cell membranes porins 718.
 β -lactamase, clavulanic acid analogs, inhibition 6214.
 β -lactamase inhibition, iodopenicillanate, bromopenicillanate 3404.
 β -lactamase, isoelectric focusing 7363.
 β -lactamase, isoelectric focusing methodology, cellulose acetate membranes 9038.
 β -lactamase isolation, purification 4665.
 β -lactamase, mechanisms 86.
 β -lactamase precursors bioaccumulation, association globomycin treatment 7350.
 β -lactamase, purification, characterization 2787.
 β -lactamase, purification, kinetics 9140.
 β -lactamase, uptake, association, antibiotic resistance, cephalosporins 9644.
 β -lactamase, 6-acetylmethylene penicillanic acid inactivation 5248.
 β -lactamase, 6-acetylmethylene penicillanic acid inactivation, mechanisms 6501.
lacZ gene, fusion, promoters, terminators, rifampicin effects on gene expression 1626.
levels, water supplies, Germany, Fed. Rep. 1716.
lipid bilayers, β -lactam antibiotics permeability 6087.
lipopolysaccharides, radioimmunoassay, solid phase methods 9296.
liquid culture, comparison, agar, media (culture) 9057.
lung lavage effects on 682.
lysine, lysates, kiodide, eggs, antibacterial activity 1552.
mecillinam - β -lactam antibiotics relationship 3314.
media (selective), agar methodology 2702.
megamodulin, purification, characterization 7301.
membranes, mannans biosynthesis 110.
methionine biosynthesis, mutation effects on genes regulation 7481.
methionyl-tRNA synthetase, aminoacylation activity, role zinc 955.
methionyl-tRNA synthetase, methionine activation, structure-activity relationships 4597.
mezlocillin + penicillins antibacterial activity synergism 7058.
microbial pollution, counting methods, estuaries, marine environment 6258.
microbial pollution, rivers, hydrology 1724.
microbial pollution, surface water 1708.
microbial pollution, swimming, recreation sites, *Escherichia coli* 8970.
microcin 15n, enzymes activity inhibition 6235.
minicells, isolation, purification, filtration, methodology 9888.
misonidazole, m-AMSA effects on radiosensitization, toxicity 666.
morphology, thiophosphamide, cyclophosphan, cytotoxicity 2444.
drug resistance, nitrofurazone, nitrofurantoin 3276.
mutants, typhophosphamide overproduction 9137.
N,N-dimethyldecaneamine antibacterial activity, relationship, pH, temperature, emollients 5175.
neurotoxins, serological tests, edema diagnosis 3865.
nitrite reductase (NADH), iron-sulfur centers, E.S.R. 73.
nitrofuran reduce, characterization 7316.
norfloxacin antibacterial activity 2440.
norfloxacin antibacterial activity 2453.
norfloxacin antibiotic resistance, media (selective) 2404.
ornithine decarboxylase, lysine decarboxylase, arginine decarboxylase, stereochemistry 6506.
outer membranes, antibacterial activity, hexametaphosphate + glycerol monocaprates 4291.
outer membranes, proteolytic enzymes, activity, colicins 1914.
outer membranes, succinate dehydrogenase, antibacterial activity, glycerol monocaprates 4290.
penicillin antibacterial activity 7069.
penicillin-binding protein, affinity ceftazidime, antibacterial activity 8835.
penicillin-binding protein, binding clavulanic acid, sulbactam, effects on antibacterial activity 7134.
penicillin-binding protein, binding, monobactams, association, antibacterial activity 3375.
periplasmic space, D-xylase-binding protein, purification, characterization 6376.
periplasmic space, L-arabinose-binding protein, galactose-binding protein, purification, characterization 6374.
periplasmic space, maltose-binding protein, purification, characterization 6373.
persistence, depuration, *Mercuria mercenaria* 2052.
pH, temperature, effects on, growth, animal wastes, pigs 8954.
phosphate batch culture 878.
phosphate-binding protein biosynthesis, relationship phos gene 4553.
phosphatidylserine decarboxylase, purification, characterization 8232.
phosphatidylserine synthase, purification, characterization 8231.
phosphoenolpyruvate carboxylase, purification 965.
phosphoenolpyruvate-protein phosphotransferase, enzyme I phosphorylation, protons transfer stereospecificity 7396.
6-phosphofructokinase isoenzymes, purification, characterization 6433.
phosphoribosyl-antranilate isomerase indole-3-glycerol-phosphate synthase, X-ray crystallography 960.
3-phosphoshikimate 1-carboxyvinyltransferase, purification, characterization 7386.
pili antigens, agglutination assays 5383.
+pili, identification, use, receptors specificity agglutination 880.
pili, purification methodology 7249.
pili receptors, hemagglutination, identification, blood group P1 5402.
pili, separation methodology 9062.
promidic acid antibacterial activity 1556.
plants extracts antibacterial activity, Iran 2458.
plasmid pKH80, relationship antibiotic resistance 631.
plasmid pRD1 transfer, *Enterobacter cloacae*, nitrogen fixation 5113.
plasmids, antibiotic resistance, association, cadmium sensitivity 1536.
plasmids copies, measuring techniques 7248.
plasmids DNA isolation, characterization, electron microscopy 6340.
plasmids DNA, isolation methodology 9875.
plasmids, genetic control, antibiotic resistance, fusidic acid, role, chloramphenicol acetyltransferase 9649.
plasmids mediation β -lactamase production, screening methodology 3594.

Escherichia coli, (continued)

- polA gene amber mutant characterization, enzymes isolation 7379.
poly(hexamethylene biguanide hydrogen chloride), antibacterial activity 2450.
poly(N-benzyl-4-vinylpyridinium bromide), removal, water treatment, methodology 9046.
polymyxin B effects on ions permeability 758.
porins, X-ray diffraction 6380.
poultry animal isolates, drug resistance, antibiotic resistance 1535.
predator-prey interactions, *Tetrahymena pyriformis*, attachment, continuous culture 2673.
protein biosynthesis, aminoglycoside antibiotics inhibition 2558.
pyroline-5-carboxylate reductase, gene mapping, protein biosynthesis, purification 1830.
pyruvate dehydrogenase multienzyme complexes, mechanisms, mathematical model 7311.
pyruvate dehydrogenase multienzyme complexes, purification, characterization 4644.
pyruvate kinase isoenzymes, purification, characterization 6422.
rabies virus glycoproteins analogs gene expression 8046.
recovery, dairy products, food contamination 4817.
reduction, composting, sewage sludge 8938.
relationship, *Salmonella*, contamination, *Crassostrea virginica*, *Mercuria mercenaria* 2042.
resistant mutant, selection, characterization, β -lactam antibiotics 5185.
respiratory tract infection, bekamycin treatment, man, antibacterial activity 6188.
ribose-binding protein, purification, characterization 6375.
ribosomal protein L29, ribosomal protein L30, tertiary structure, hydrodynamics, C.D., N.M.R. 1838.
ribosomal protein S1, amino acid sequence statistical analysis 4567.
ribosomal protein S14, amino acid sequence, secondary structure, predictions 4566.
ribosomal proteins, ribosomal subunit 30S, high-performance liquid chromatography, fractionation 1775.
ribosomal subunit 50S, ribosomal proteins, C.D., N.M.R. 7298.
ribosomal subunit 50S, ribosomes, tyrosine residues, iodination 7289.
rifampicin effects on transcription 1627.
RNA polymerase, mutants, structure-activity relationship 4661.
sea water, antibacterial activity 3318.
seasonal variations, survival, estuaries, factors affecting 6268.
sensitivity, fosfomycin, \pm amoxicillin 8040.
sennine proteinase, purification, characterization 3679.
sewage effluents, coliforms, isolates, antibiotic resistance, transfer 636.
Shigella sonnei, colicins, production, antibacterial activity 669.
siderocin antibiotic resistance, association ton A gene proteins 641.
stereochemistry, phosphoenolpyruvate-fructose phosphotransferase mechanisms 6188.
streptomycin, antibiotic resistance genes, mutants, selection methodology 4481.
streptothricin antibiotic resistance 3285.
succinate dehydrogenase, purification, characterization 1912.
sulbactam, antibacterial activity 2545.
sulfoloboranthus effects on, protein biosynthesis, DNA biosynthesis, RNA biosynthesis 2456.
sulfonamide susceptibility, association, cotrimoxazole drug resistance 6004.
sulphite reductase (NADPH), siroheme iron-sulfur centers, E.S.R. 2807.
sulphite reductase (NADPH), sulfite, nitrite complex formation, hemoproteins subunits 2783.
superoxide dismutase, redox-potential 4588.
survival, bactericidal activity, copper soil amendment, soils (organic) 8708.
survival, freezing, vegetables 2026.
survival, slurries, cattle animal wastes, isolation, drug resistance 2617.
tetracycline, antibacterial activity 2553.
tetracycline, comparison, minocycline, transport, relationship, susceptibility 635.
tetracycline excretion, role susceptibility, antibacterial activity 9767.
tetracycline sensitivity, Klebsiella, tetracycline sensitivity 7077.
tetracyclines resistance 1545.
tetrahydrofolate dehydrogenase, genes, trimethoprim, drug resistance 1522.
thiacycline antibacterial activity, comparison, tetracycline, doxycycline, minocycline 1837.
thioredoxin, folding, conformation, C.D. 5463.
threonine effects on, valine sensitivity, association, nutrient status 3304.
toxins gene transfer, phages conjugation, toxicity, laboratory animals, domestic animals 9315.
toxins, purification, characterization 2952.
toxins purification, characterization, comparison *Shigella dysenteriae* 4909.
trapping, fibrin polymerization 2698.
traveller's diarrhea, vaccines development, man 8048.
trimethoprim resistance transfer, plasmids role 6028.
trimethylamine-N-oxide reductase, inhibition, preservatives 269.
trisaccharides synthesis, antigen O antigenic determinants 2821.
L-tryptophan production 9160.
tryptophan synthase α -subunit unfolding, urea induction, absorption spectroscopy 4590.
tryptophan synthase, conformation, ligands binding effects on 6485.
tryptophan synthase, pyridoxal 5-phosphate binding, N.M.R. 4628.
tryptophan synthase, quaternary structure, fluorescence, hydrodynamics 1871.
tryptophan synthase use, L-selenocysteine enzymatic synthesis 9127.
tryptophan synthase, X-ray scattering 1865.
UDP-acetyl glucosamine 1-carboxy vinyl transferase, antibacterial activity, fosfomycin inactivation 8043.
UDP-acetylglucosamine 2-epimerase, purification, characterization 6448.
UDP-acetylglucosamine dehydrogenase, purification, characterization 6450.
ultrastructure, fosfomycin effects on 8892.
uptake, oxygen, solutes, association, growth, measuring techniques equipment 9865.
uridine phosphorylase, purification 9164.
urinary tract clinical isolates, antibiotic resistance 7034.
urinary tract clinical isolates, norfloxacin antibacterial activity 9671.
urinary tract infection, detection, gas chromatography methodology 9929.
urinary tract isolates, antibiotics sensitivity 8813.
viability, food films, surfaces, refrigeration 2025.
viability, freeze-thawing, skim-milk 220.
water isolates, rivers, antibiotic resistance, R factors incidence 7204.

Essential oils

- Acorus calamus*, antimicrobial activity 2495.
antimicrobial activity, airborne microorganisms, fungi, synergism, ethanol + sodium

essential oils, (continued)

- chloride+acetic acid 7115.
Caesulia australis, antifungal activity, *Helminthosporium oryzae* 4297.
Menha arvensis var. *piperascens*, antifungal activity, *Helminthosporium oryzae* 6876.
 preservatives, antimicrobial activity 706.
 treatment, urinary tract infection, man 2430.
teraeae,
Hordeum vulgare disease resistance, powdery mildew, *Erysiphe graminis* f.sp. *hordei* 4060.
 hydrolysis, polyoxyethylene sorbitan monooleate, purification, characterization, *Mycobacterium smegmatis* 8265.
 inhibitors, ebelactone, structure, *Streptomyces* 2809.
 Tween 80 hydrolysis, mycobacterium, purification physicochemical properties 8259.
terification,
 diazomethane oligo(D-galactosiduronic acids), pectinesterase effects on, *Aspergillus foetidus* 8251.
teruaries,
 biodegradation, surfactants 5596.
Escherichia coli survival, seasonal variations, factors affecting 6268.
 isolation, *Vibrio cholerae*, microbial pollution 2629.
 microbial pollution, *Escherichia coli*, *Vibrio cholerae*, counting methods 6258.
 microbial pollution, mathematical models 3813.
 sediments, aromatic compounds, hydrocarbons, metabolism, microorganisms 5145.
 sediments, bacteria biomass, muramic acid indicators, gas chromatography 9027.
 sediments, enteritis viruses, isolation methodology 8106.
 sewage effluents, waste disposal effects on viruses levels 1704.
therubutol,
 analogs antibacterial activity, *Mycobacterium*, association, tuberculosis treatment 5188.
 antibiotic synergism, antibacterial activity, *Mycobacterium intracellulare* 3309.
 \pm dimethyl sulfoxide, antimycobacterial activity, *Mycobacterium avium-intracellulare* 2401.
 drug sensitivity testing, *Mycobacterium intracellulare*, infection, monkeys, clinical aspects 4285.
thene,
 gas production, soil microorganisms, soil moisture, nitrate effects on, anaerobic conditions 9567.
 production, anaerobic bacteria, cattle feces fermentation 5138.
thenediol,
Penicillium simplicissimum, biodegradation 167.
thanol,
 antimicrobial activity, airborne microorganisms, fungi, synergism, sodium chloride+acetic acid+essential oils 7115.
 aqueous solutions, antibiotics acid-base status 5234.
 bactericidal activity, bacteria contamination, enterovirus immobilization, bentonite 3523.
 biosynthesis, *Candida utilis* growth, fermenters 138.
 biosynthesis, cellobiose fermentation, *Dekkera intermedia* β -D-glucosidase purification, characterization 5513.
 biosynthesis, corn fermentation, batch culture, bacteria 134.
 biosynthesis, *Kluyveromyces marxianus*, inulin effects on 3748.
 biosynthesis, reactors, yeasts 139.
 biosynthesis, *Saccharomyces cerevisiae* immobilized cells, acetaldehyde biosynthesis 131.
 biosynthesis, *Saccharomyces cerevisiae* immobilized cells, glucose fermentation 137.
 biosynthesis, sugars fermentation, yeasts 7525.
 biosynthesis, xylose fermentation, *Pachysolen tannophilus* 135.
 biosynthesis, yeasts, cellulose metabolism 7510.
 biosynthesis, *Zymomonas mobilis*, fermentation, proteins+phospholipids complex use 137.
Candida, cellulodextrins fermentation 2872.
 dairy products, bacteria, fermentation effects on 4853.
 effects on glucose biosynthesis, cellulose fermentation, *Trichoderma reesei*, *Saccharomyces cerevisiae* 4705.
 effects on, thermal injury, growth, *Kluyveromyces fragilis* 8394.
 evaporation, fermentation yield 8399.
 fermentation, β -glucanase effects on, *Bacillus* 1993.
 fermentation, association, *Saccharomyces cerevisiae* immobilized cells, glycerol biosynthesis 127.
 fermentation, association, sweet potatoes, use, *Endomycopsis fibuligera* exo-1,4- α -D-glucosidase 9230.
 fermentation, brewing yeasts, characterization methodology 1049.
 fermentation, by-products, immobilized cells, *Zymomonas mobilis*, *Saccharomyces bayanus* 8396.
 fermentation, carbon dioxide effects on yeasts 141.
 fermentation, cellulase decomposition, yeasts, fungi 3753.
 fermentation, *Clostridium beijerinckii* immobilized cells 4737.
 fermentation, corn, *Saccharomyces cerevisiae* 3811.
 fermentation, factors affecting, *Saccharomyces* 1048.
 fermentation, growth conditions, continuous culture 8404.
 fermentation, immobilized cells, reactors, mathematical models 3751.
 fermentation, lactic acid bacteria incidence, wine storage 9243.
 fermentation, methodology, sweet potatoes 5569.
 fermentation, microorganisms 2861.
 fermentation, *Pachysolen tannophilus*, galactose assimilation 146.
 fermentation, *Saccharomyces cerevisiae*, by-products inhibition effects on 9237.
 fermentation, *Saccharomyces cerevisiae*, maintenance energy, biomass concentration, calorimetry 7528.
 fermentation, *Saccharomyces cerevisiae*, *Saccharum officinale* crop residues, fermenters 2873.
 fermentation, *Saccharomyces cerevisiae*, wood, acids, hydrolysates 4734.
 fermentation, starch metabolism, yeasts 5570.
 fermentation, technology 7536.
 fermentation, wastes, waste treatment, by-products recovery 9803.
 fermentation, yeasts 2044.
 fermentation, yeasts, computer applications 9228.
 fermentation, yeasts, conferences 3640.
 fermentation, yeasts, oxygen tension effects on 143.
 fermentation, yeasts, technology 142.
 fermentation, *Zymomonas mobilis*, efficiency 2857.
 fermentation, *Sorghum bicolor*, yeasts 4735.

Ethanol, (continued)

- glucose transport, *Saccharomyces cerevisiae*, effects on 1518.
Helianthus tuberosus carbohydrates, role yeasts 2389.
 inhibition ethanol fermentation, *Zymomonas mobilis* 7515.
 inhibition, *Kluyveromyces marxianus*, kinetics 1988.
 inhibition, levansucrase activity, *Zymomonas mobilis* 8270.
 inhibition, relationship, glucose substrates concentration, *Saccharomyces cerevisiae*, *Saccharomyces bayanus* 2870.
 \rightarrow isopropanol+butanol, fermentation, *Clostridium beijerinckii* immobilized cells 9241.
 levels, factors affecting *Zymomonas mobilis* cell culture 9056.
 levels, *Saccharomyces uvarum*, wort nutrient requirements, brewing 7516.
 levels, seafood spoilage, detection, bacteria 8458.
 media, yeasts growth, lipids biosynthesis 7468.
 metabolism, *Candida utilis* continuous culture, biomass yield, oxygen effects on 7509.
Neurospora crassa, production, use, cellulose 4740.
 production, association, *Saccharomyces cerevisiae* immobilization methodology 7217.
 production, association starch degradation 1051.
 production, bacteria, books 5447.
 production, beets fermentation, yeasts 7508.
 production, biomass conversion, sugars fermentation, conferences 10010.
 production, bioreactors, use, resins immobilized cells, *Zymomonas mobilis* 9250.
 production, *Candida mutants*, oxygen uptake relationship 8398.
 production, *Candida shehatae*, D-xylose fermentation 8407.
 production, *Candida utilis*, continuous culture, mathematical models, oxygen effects on 4731.
 production, cellulase activity, *Trichoderma* 1047.
 production, *Clostridium thermocellum*, association, cellulose conversion 9249.
 production, crop residues, cellulase activity, *Trichoderma* 4727.
 production, fermentation, starch, selection, yeasts, strains 3756.
 production, fructose utilization, *Zymomonas mobilis* 7514.
 production, growth conditions, media (culture), *Clostridium saccharolyticum* 5575.
 production, growth conditions, nutrient requirements, *Clostridium saccharolyticum* 5574.
 production, immobilized cells, yeasts, carbon dioxide inhibition 8397.
 production, *Kluyveromyces fragilis*, lipids effects on 2866.
 production, *Pachysolen tannophilus* 2871.
 production, *Pachysolen tannophilus*, use, hydrolysates, *Pinus radiata*, *Populus tremuloides* 8411.
 production, *Penicillium funiculosum*+*Saccharomyces uvarum*, cellulose, fermentation, hydrolysis 8401.
 production, relationship *Zymomonas mobilis* ultrastructure, glucose utilization 5587.
 production, *Saccharomyces*, carbohydrates conversion 4738.
 production, *Saccharomyces carlsbergensis*, nutrient enrichment effects on 8408.
 production, *Saccharomyces cerevisiae*, aerobic conditions, mitochondria mutants 3749.
 production, *Saccharomyces cerevisiae*, association, hybridization, protoplast fusion, genetic engineering 8402.
 production, *Saccharomyces cerevisiae*, association, immobilization use pectin 6631.
 production, *Saccharomyces cerevisiae*, bioreactors 7513.
 production, *Saccharomyces cerevisiae*, cellulose, films, immobilized cells 6632.
 production, *Saccharomyces cerevisiae* immobilized cells reactors 3743.
 production, *Saccharomyces cerevisiae*, wild type, comparison, mitochondria mutants 8409.
 production, *Saccharomyces* mixed culture 4736.
 production, *Saccharomyces*, role, membranes fatty acids 6633.
 production, *Saccharomyces rosei*, use, *Helianthus tuberosus* plant extracts, inulin 8410.
 production, *Saccharomyces*, use, bamboo substrates 9225.
 production, *Saccharomyces uvarum*, immobilized cells 6634.
 production, separation techniques, association, adsorption+desorption 9242.
 production, *Torulopsis holmii*, sugars fermentation 3747.
 production, use, wastes, books 10000.
 production, whey, *Kluyveromyces bulgaricus*, *Kluyveromyces fragilis* 4732.
 production, whey, microorganisms 3762.
 production, yeasts, activity 7527.
 production, yeasts, cellobiose fermentation 9226.
 production, yeasts, factors affecting 1046.
 production, yeasts fermentation, analysis methodology 7524.
 production, yeasts fermentation, models, reviews 7522.
 production, yeasts fermentation, parameters 7523.
 production, yeasts, immobilized cells, polymers adsorption 7521.
 production, yeasts, pentoses conversion 9236.
 production, yeasts, pentoses fermentation 4728.
 production, yeasts, *Saccharum officinale*, bagasse 5571.
 production, *Zymomonas mobilis*, association, alcohol dehydrogenase, pyruvate decarboxylase, purification, characterization 6487.
 production, *Zymomonas mobilis*, bioreactors 6635.
 production, *Zymomonas mobilis*, media (culture) 3550.
 production, *Zymomonas mobilis*, reviews 7507.
 production, *Zymomonas mobilis*, *Saccharomyces cerevisiae*, wood cellulose hydrolysis, *Trichoderma* 3750.
 production, *Zymomonas mobilis*, starch fermentation 9233.
 production, *Zymomonas mobilis*, use, continuous culture fermenters 9245.
 production, *Saccharomyces cerevisiae*, fermentation, corn, factors affecting 8414.
 production, *Saccharomyces cerevisiae*, fermentation, yield, polymers effects on 5573.
 separation, fermentation broths 9238.
 stabilization subtilin, *Bacillus subtilis* 5503.
 starches conversion, mixed culture, *Saccharomyces fibuliger*+*Zymomonas mobilis* 7529.
 temperature, effects on, corn, *Aspergillus oryzae*, fermentation 8395.
 tolerance enhancement, Tween 80 role, *Saccharomyces*, sake fermentation 9244.
 tolerance, *Saccharomyces uvarum* mutants, selection methodology 4520.
 uptake, *Saccharomyces cerevisiae*, fermentation relationship 9246.
 use, *Bacillus* spores preservation 2699.
 utilization, biomass production, *Torulopsis ethanolicola* 9120.
 yield, *Saccharomyces*, inoculum levels effects on 4729.
Ethanolamine,
 production, *Bacillus brevis*, gramicidin biosynthesis 774.
Ethazole,
 \pm PCNB, antifungal activity, synergism, *Pythium aphanidermatum* 5062.

Subject Index

- Ethidium bromide**, fluorescence staining, fungi, methodology 2720.
- Ethionamide**, antibiotic synergism, antibacterial activity, *Mycobacterium intracellulare* 3309.
 z: dimethyl sulfoxide, antimycobacterial activity, *Mycobacterium avium-intracellulare* 2401.
- Ethionine**, resistant mutant, *Serratia marcescens*, threonine biosynthesis 4580.
- Ethiopia**, *Shigella*, incidence, drug sensitivity testing, antibiotic sensitivity testing 2525.
- Ethionium**,
 + antibiotics, antibacterial activity, bacteria 1558.
 + antibiotics, antibacterial activity, *Pseudomonas aeruginosa*, clinical isolates 2523.
- N-Ethoxycarbonyl-2-ethoxy-1,2-dihydroquinoline**, chemical modification coupling factor 1 β -subunit, *Escherichia coli* 8268.
- 7-Ethoxycoumarin**, biotransformation, production, 7-hydroxycoumarin, 7-hydroxy-6-methoxycoumarin, *Streptomyces griseus* 7493.
- Ethyl acetate**, reduction, *Geotrichum candidum*, ethyl 3-hydroxybutyrate production 7466.
- Ethyl 3-hydroxybutyrate**, production, *Geotrichum candidum*, ethyl acetate reduction 7466.
- Ethyl 3,4-dimethoxybenzylcyanooacetic acid**, antifungal activity 8784.
- 5-Ethyl-2-deoxyuridine**, drug sensitivity testing, herpes simplex virus 2 5219.
- Ethylene**, activation nitrogenase, molybdenum-iron protein E.S.R., *Klebsiella pneumoniae* 5523.
 biosynthesis, leguminosae roots, *Rhizobium nodulation*, sulfur fertilizers effects on 1503.
 effects on cell walls glycoproteins accumulation, *Colletotrichum lagenarium*, effects on, post-harvest decay, fungi, growth 8794.
 gas production, soil microorganisms, soil moisture, nitrate effects on, anaerobic conditions 9567.
 production, association, α -oxo- γ -methylthiobutyric acid, *Phanerochaete chrysosporium* 1517.
 production, *Hordeum vulgare* wounds, *Drechslera graminea* infection 1183.
 production, soil microorganisms, novobiocin, cycloheximide, effects on 5907.
- Ethylene bisdithiocarbamate**,
 + metalaxyl treatment, *Spinacea oleracea*, white rust, blue mold, disease control 5064.
- Ethylene glycol**, *Methanobacterium desulfovibrio*, biodegradation 8430.
 utilization, *Escherichia coli*, metabolic pathways 2010.
- Ethylene oxide**, disinfection, hospitals 9821.
 production, *Mycobacterium immobilized cells*, bioreactors 3282.
 resistance, *Bacillus spores* 2412.
 resistance, factors affecting, *Bacillus subtilis* var. *niger*, sporulation 9705.
 sterilization, indicator species, *Bacillus subtilis* subsp. *niger*, factors affecting 4322.
- Etridiazole**, prophylaxis, treatment, *Phytophthora palmivora* infection, orchards 5828.
- Eubacterium aerofaciens**, 7 β -hydroxysteroid dehydrogenase (NADP⁺) purification, characterization 958.
 propachlor metabolism, 2-mercapto-N-isopropylacetanilide production 8385.
- Eubacterium lentum**, biodegradation, fatty acids, bile acids 5576.
 12 α -hydroxysteroid dehydrogenase substrate specificity 1873.
 survival, swabs transport system, temperature association 6334.
- Eucalyptus**, *Armilaria luteobrunnea* infection, etiology 8652.
 forests, leaf litter decomposition, measuring techniques 1447.
 forests, soil extracts effects on sporulation, *Phytophthora cinnamomi*, *Phytophthora cryptogea* 525.
 host specificity, fungi mycorrhizas 5901.
 leaf litter biodegradation, relative humidity, substrates water content effects on 153.
 leafspot, fungi, New Zealand 7706.
 leafspot, *Septoria pulcherrima* sp. nov., *Trimatostroma bifarium* sp. nov., characterization 5085.
 mycorrhizas, New Zealand 7774.
 mycorrhizas, species composition 1440.
 phenols effects on *Cryphonectria cubensis* conidia spore germination, mycelia growth, role, disease resistance, canker 5814.
 plant diseases, *Cylindrocyladium*, pathology 4178.
 seeds, fungal flora, characterization 3103.
- Eucalyptus camaldulensis**, dieback, *Botryosphaeria ribis*, pathology 4159.
- Eucalyptus diversicolor**, forests, calcium oxalate occurrence, nutrient dynamics, decomposition, microorganisms 4136.
- Eucalyptus gonolocalyx**, *Phytophthora cinnamomi* infection, water relations 3982.
- Eucalyptus macrohyncha**, *Phytophthora cinnamomi* infection, water relations 3982.
- Eucalyptus marginata**, *Phytophthora cinnamomi* dieback, disease transmission, pathogenesis 9523.
 roots, mantles, calcium oxalate crystals detection, association ectomycorrhizas symbiosis 4211.
- Eucalyptus obliqua**, forests, soil nitrogen mineralization 523.
- Eucalyptus regnans**, forests, soil nitrogen mineralization 523.
Phytophthora cinnamomi infection, disease resistance, intraspecific relationships 8653.
- Eucalyptus at-johnii**, growth rate, mycorrhizas, roots, *Pisolithus tinctorius* 6950.
 seedlings, mycorrhizas development 4208.
- Eugenol**, antifungal activity, *Candida albicans*, *Cryptococcus neoformans* 2470.
- Eukaryotes**, adenylate cyclase activation association, *Escherichia coli* enterotoxins, biosynthesis, plasmids role 7642.
- Eupatorium capillifolium**, plant extracts, antifungal activity, *Helminthosporium oryzae* 691.
- Eupenicillium anatum**, soil microorganisms, Spain, check lists 3202.
- Eupenicillium brefeldianum**, brefeldin A biosynthesis, oxygen incorporation 4421.
- Eupenicillium spiculosum**, soil microorganisms, Spain, check lists 3202.
- Euphorbia lathyris**, soil-borne diseases, pathogenicity, *Macrophomina phaseolina*, *Pythium* *ulmivenerum*, *Rhizoctonia solani* 5002.
- Euphorbia pulcherrima**, poinsettia mosaic virus infection susceptibility, Canada 5014.
 poinsettia mosaic virus, poinsettia cryptic virus, elimination, suspension culture 4037.
- Euphorbiaceae**, pathogenicity, *Elsinoe*, relationship, *Sphaceloma* 4979.
- Europe**, comparison, North America, *Verticillium albo-atrum*, virulence, *Medicago sativa*, field trials 8558.
 hospitals, water isolates, *Legionella longbeachae*, *Legionella pneumophila* 6263.
- Europhium clavigerum**, plant diseases, infection susceptibility, pest attack, *Pinus contorta*, *Dendroctonus ponderosae* 8651.
- Euscelidium variegatum**, vectors, yellows, mycoplasma-like organisms 9398.
- Euscelis incisus**, vectors, yellows, mycoplasma-like organisms 9398.
- Euscelis oboletus**, disease transmission, mycoplasma-like organisms, plant diseases 9399.
- Euscelidius variegatus**, enzyme-linked immunosorbent assay, detection *Spiroplasma citri* 3046.
- Eutrophic environments**, lakes sediments, bacteria, factors affecting methanogenesis 624.
- Eutypa acharii**, biodegradation, *Acer pseudoplatanus*, ecological distribution 4181.
- Eutypa emmeniae**, dieback, *Prunus amygdalus* 6786.
 dieback, *Vitis vinifera*, disease control, use, benomyl, USA, Michigan 6881.
 host range, plants, Australia 3900.
 identification, *Vitis vinifera*, infection, isolation 1299.
 isolation, *Vitis vinifera* 1299.
- Evaporation**, ethanol, fermentation yield 8399.
- Evolution**, association, *Aspergillus flavus* sclerotia, aflatoxins, indole metabolites 3715.
 Brassica oleracea var. *botrytis*, disease resistance, *Plasmidiophora brassicae* 5861.
 competition, *Uredinales* 6764.
 denitrification, denitrifying bacteria, reviews 5111.
 reproductive strategy, *Aganaceae*, *Gasteromycetes*, ectomycorrhizas 9535.
- Evolutionary genetics**, *Puccinia graminis* subsp. *graminicola*, rust, Gramineae, ecology 3004.
- Excum affine**, *Nectria haematococca* infection, stem rot, wilt 1262.
- Excretion**, herpes simplex virus, herpes labialis, man, surfaces viability, disease spread 3491.
- Excretory products**, disposal, man, pathogens control, vectors 6273.
- Exo-1,3- β -D-glucanase**, self-association, *Saccharomyces cerevisiae*, *Candida utilis*, *Geotrichum lacticum*, *Kluyveromyces fragilis* 44.
- Exo-1,3- β -D-glucosidase**, *Lycopersicon esculentum*, defense mechanisms, wilt, *Verticillium albo-atrum* 407.
- Exo-1,4- α -D-glucosidase**, active sites ionization, *Aspergillus awamori* 6459.
Aspergillus niger, purification, characterization 29.
Aspergillus oryzae, biosynthesis, factors affecting 8316.
Aureobasidium pullulans, growth rate, starch 6403.
Bacillus subtilis, bioassays 4681.
 biosynthesis, *Aspergillus awamori* var. *kawachi* 3669.
 Endomycopsis fibuligera, use, ethanol fermentation, association, sweet potatoes 9230.
 fragments, purification, characterization, *Rhizopus* 1909.
 glucose, gluconolactone binding, *Rhizopus* 6484.
 hydrolysis, starch, *Trichoderma reesei* 6499.
 immobilized enzymes, *Aspergillus awamori* var. *kawachi*, glucose production 830.
 immobilized enzymes, *Aspergillus niger* 49.
 immobilized enzymes, physical properties, columns 7324.
 production, *Aspergillus niger* 101.
 production, protoplasts fusion, transformation, *Saccharomyces diastaticus* 7323.
 purification, characterization, *Aspergillus niger* 939.
 purification, characterization, *Rhizopus niveus* 6456.
Rhizopus, α -amylase, immobilization, use, Sepharose-6MB 9147.
Rhizopus, *Aspergillus niger*, ethanol fermentation methodology, sweet potatoes 5569.
 N-terminus, C-terminus, amino acid sequence, *Rhizopus* 7315.
 yeasts, production 3691.
- Exo-1,4- β -D-glucosidase**, cellulose hydrolysis, *Chaetomium crispatum* 9151.
 induction, *Aspergillus terreus* 7330.
 Penicillium funiculosum, purification, characterization 6401.
- Exo-1,4- β -D-xylosidase**, *Bacillus coagulans*, physicochemical properties 4685.
 purification, *Aspergillus niger* 1857.
 purification, characterization, *Aspergillus niger* 6462.
 purification, characterization, *Bacillus pumilus* 6436.
 purification, physicochemical properties, kinetics, *Penicillium wortmanni* 6438.
Streptomyces saccharalis, purification, characterization 6550.
- Exo-1,3- β -glucanase**, *Trichoderma pseudokoningii*, carboxymethylcellulose stimulation biosynthesis 74.

- α-cellulohydrolase**, activity, relationship, β-D-glucosidase levels, cellulolytic microorganisms, fungi, measuring techniques 2814.
- penicillin funiculusum**, immobilization, use, poly(vinyl alcohol) 8315.
- Sporichium thermophile**, production 8323.
- transglycosylation activity**, *Ipex lacteus* 6453.
- Trichoderma reesei**, purification, characterization 9146.
- Exo-hydroxycinnole**, *Aspergillus niger*, 1,8-cineole conversion 3736.
- α-maltohexaohydrolase**, *Acetobacter aerogenes*, immobilization, radiation methodology 9177.
- α-methylviene cephalosporin C**, *Cephalosporium acremonium*, conversion, cell-free system 7145.
- Exotoxin**, detection, high-performance liquid chromatography, *Bacillus thuringiensis* 6725.
- rotoxin A**, *Pseudomonas aeruginosa*, toxoids preparation, photoaffinity labelling use 8050.
- rotoxins**, amphoteric, effects on, biological properties, *Streptococcus pyogenes* 2084.
- Bacillus thuringiensis*, effects on *Ostrinia nubilalis* 7489.
- bacteriostats**, cytostatic agents, effects on *HeLa* cells, *Pseudomonas aeruginosa* 1108.
- characterization, *Staphylococcus aureus*, toxic shock syndrome isolates 6706.
- purification, characterization, *Pseudomonas aeruginosa* 307.
- Staphylococcus aureus*, isoelectric focusing 7639.
- spices**, industrial wastes, biodegradation, reviews 5578.
- aeerohilum rostratum**, leafspot, *Chrysaldarcarpus lutescens*, etiology 1269.
- leafspot, *Chrysaldarcarpus lutescens*, irrigation effects on pathogenesis 1274.
- aeerohilum turicum**, leaf blight, disease resistance, HTN gene, *Zea mays* 5710.
- leaf blight, pathogenesis, *Zea mays*, USA, Ohio 7668.
- leaf blight, *Zea mays*, factors affecting 5717.
- monocerin, phytoactivity, *Sorghum halpense* 3959.
- racces, leaf blight, virulence, *Zea mays*, USA 9363.
- leaf blight, virulence, disease resistance, HT gene, *Zea mays* 1370.
- enzymes**, biosynthesis, *Lipomyces kononenkoae* 1853.
- biosynthesis, *Staphylococcus simulans*, amino acids, cyclic AMP, effects on 2792.
- endonuclease, adenine stimulation, *Staphylococcus aureus* 7329.
- Penicillium, *Fusarium*, polygalacturonase biosynthesis 1922.
- phytophase, *Candida albicans*, assays, *Petr* dishes 7327.
- Pleospora infectoria*, *Ulocladium chartarum*, effects on pathogenesis, fruit rot, *Cucumis* 4915.
- production, *Propionibacterium* continuous culture, pH effects on 7312.
- protease, *Aeromonas salmonicida*, purification 9171.
- Pseudomonas fluorescens*, triacylglycerol lipase, purification, characterization 5491.
- Saccharomycopsis lipolytica**, proteinase, production, purification, characterization 3681.
- secondary metabolism, microorganisms, books 3636.
- soil microorganisms, activity, binding soil 2344.
- Ustilago esculenta*, acid phosphatase, purification 4625.
- xtacellular polymers**, activated sludge, bacteria, heavy metals adsorption 1690.
- aquatic microorganisms, role waste water treatment, cell aggregation 8059.
- bacteria, heavy metals adsorption, activated sludge 1689.
- carbohydrate composition, *Pseudomonas*, *Azotobacter*, *Achromobacter* 1958.
- Rhizobium**, polysaccharides, carbohydrate composition 3710.
- microorganisms biosynthesis, reviews 1951.
- polysaccharides, *Alcaligenes faecalis* var. *myxogenes*, production 3712.
- polysaccharides, biosynthesis, *Methylococcus* 9189.
- polysaccharides, *Rhizobium meliloti*, characterization 9193.
- polysaccharides structure, *Agrobacterium tumefaciens*, *Agrobacterium radiobacter* 9198.
- Rhizobium**, relationship nitrogenase activity, nodules, *Vigna radiata*, *Cicer arietinum* 8678.
- Xanthomonas campestris*, polysaccharides biosynthesis, media (culture) 2682.
- xtreterrestrial life**, microorganisms, concentration, electric fields methodology 9001.
- ye spot**, *Cercospora coffeicola*, *Coffea*, Cuba 3910.
- Coffea*, Cuba 2189.
- Kabatella zae*, yield reduction, *Zea mays* 4964.
- Rhizoctonia cerealis*, etiology, *Triticum aestivum* 2124.
- Zizania aquatica*, etiology, *Drechslera glauca* 1170.
- Kabatella zae**, disease resistance, plant breeding, *Zea mays* 9456.
- Pseudocercospora herpotrichoides**, shading, effects on Gramineae senescence 3956.
- Triticum aestivum*, *Pseudocercospora herpotrichoides*, rainfall spores dispersal 5727.
- brics**, silver nylon, antimicrobial activity 3371.
- actor A**, biosynthesis, genetic analysis, *Streptomyces coelicolor*, *Streptomyces griseus* 9219.
- actumycin**, *Streptomyces lavendulae*, isolation, antibacterial activity 3436.
- acutivate bacteria**, ammonia, nitrogen, removal, wastewater treatment 5331.
- AD**, binding regions, sarcosine oxidase, amino acid sequence, *Corynebacterium* 6539.
- enzymatic synthesis, bacteria 9214.
- agus**, forests, leaf litter decomposition, nutrient dynamics 2294.
- forests, mortality factors, pathogens, fungi 4171.
- forests, soil horizons, aerobic bacteria levels, seasonal variations 524.
- forests, soil nitrogen mineralization, association, nitrifying bacteria, ammonifying bacteria, seasonal variations 4137.
- fungi infection, association *Phyllaphis fagi* outbreaks 3166.
- Fagus, (continued)**
- mycorrhizas, granules, phosphorus levels, calcium levels 6973.
- Fagus grandifolia**, bark, Deuteromycetes fungal flora 1438.
- Fagus grandifolia**, stands, cellulolytic microorganisms, wood decomposition, spatial distribution, population levels, bacteria, fungi 6881.
- Fagus sylvatica**, forests, clear cutting, *Picea abies* replacement, bacteria soil microorganisms population changes 7779.
- forests, fertilizer applications, population density, ectomycorrhizas 8649.
- forests soil, bacteria population density 4142.
- forests, soils (organic), nutrient balance, soil microorganisms 9514.
- leaf litter decomposition, bacteria, carbon, nitrogen production, association, climate 2021.
- wood, decomposition, Basidiomycetes, spatial distribution 5860.
- wood, decomposition, fungi, carbon dioxide gas production, gas chromatography 9530.
- Falcarindiol**, biosynthesis, *Schefferia digitata*, antifungal activity, dermatophyte fungi 687.
- Fallow land**, *Triticum aestivum*, effects on root rot 379.
- Farmer's lung**, *Thermoplasma faeni*, immunoprecipitation, diagnosis, man 4486.
- Fats**, beef, microflora, chemical composition 7573.
- Fatschedera lize**, wilt, *Fusarium oxysporum* f.sp. *fatschederae* 6802.
- Fatty acid composition**, association, antibacterial activity, lysolecithin, *Mycobacterium tuberculosis* 4286.
- Bacillus subtilis* 3:5'-cyclic-nucleotide phosphodiesterase inhibitor, isolation 7303.
- bacteria, antibiotic AL-87 effects on 8895.
- lakes sediments, organic compounds biodegradation, bacteria 7553.
- phospholipids, *Nicotiana tabacum*, hypersensitive response, tobacco mosaic virus 7741.
- plasma membranes, polymyxin antibiotic resistance, *Pseudomonas aeruginosa* 7040.
- relationship, viability, *Saccharomyces cerevisiae*, dehydration 1839.
- Staphylococcus aureus*, *Staphylococcus epidermidis*, methicillin antibiotic resistance 6723.
- Fatty acids**, bacteria, inhibition, β-lactamase 6152.
- Calluna vulgaris* heaths, isolation, identification, phytotoxicity, antifungal activity 5929.
- Clostridium*, clinical isolates identification 6321.
- effects on *Aspergillus flavus*, *Aspergillus parasiticus*, aflatoxins biosynthesis 6701.
- effects on, bacteria growth, crop residues digestion, forage quality 4860.
- Eubacterium lentum*, biodegradation 5576.
- metabolism, *Mycobacterium*, measuring techniques, radiometry 837.
- microorganisms biodegradation production, antifungal activity, *Calluna vulgaris* heaths soil, production 5930.
- peanuts, *Aspergillus*, *Rhizopus*, spoilage agents on 4053.
- production, bacteria, use, mandarin orange peel, Japan 4260.
- Saccharomyces* membranes, role, ethanol production 6633.
- single-cell protein, feeding trials, cattle, association cow's milk 250.
- Streptococcus faecalis*, gas chromatography, use, capillary column 5429.
- Fatty-acid synthetase**, multienzyme complexes, purification, characterization, *Mycobacterium smegmatis* 924.
- purification, characterization, *Cephalosporium caeruleus* 8217.
- quaternary structure, electron microscopy, dimethyl suberimide cross-linking, ultracentrifugation, *Brevibacterium ammoniacum* 2763.
- yeasts, interaction rats mammary gland thioesterase 8279.
- Fethers**, *Pavo cristatus*, biodegradation, keratinophilic fungi 7555.
- Fecal coliforms**, contamination, drinking water, livestock 8975.
- food contamination, dairy products, confectionery 9276.
- ground water movement, sewage waste disposal sites 9814.
- Fecal microflora**, *Escherichia coli* isolates, drug resistance, Netherlands 7033.
- microbial pollution, drinking water, hydrogen sulfide production detection 3478.
- pollution detection, water pollution, pollution detection methodology, membrane filtration 2626.
- role, litter decomposition, forests, *Clethrionomys* 1449.
- Streptococcus*, media (isolation) 3595.
- Streptococcus*, specialia 6304.
- Feces**, animals, association, fertilizers, *Salmonella* incidence 2637.
- bacteria, man, water resources, quantification 5322.
- calicivirus, detection, radioimmunoassay 9847.
- cattle, fermentation, anaerobic bacteria, hydrocarbons production 5138.
- Clostridium difficile* cytotoxins, counter immunoelectrophoresis, immunodiagnosis, colitis 9306.
- coliforms, *Streptococcus*, indicator species enumeration, water sampling, light effects on 2625.
- detection *Clostridium difficile* toxins, counter immunoelectrophoresis 4912.
- Gram stain, *Clostridium difficile*, colitis, diagnosis methodology 9940.
- Helicobacter* A, diagnosis, enzyme-linked immunosorbent assay, man 4469.
- isolates, *Salmonella typhi*, association, typhoid fever, antigens detection, use, agglutination 841.
- isolation, *Aeromonas*, *Plesiomonas*, media (culture) 9896.
- man, isolation, *Campylobacter fetus* subsp. *jejuni*, media (transport) 9977.
- microbial pollution, water pollution, Brazil 8971.
- pathogens, sampling methodology, man 2708.
- Pseudomonas aeruginosa*, thienamycin media (isolation) 9066.
- public health, Columbia, *Cryptosporidium* neofortis association contamination 4457.
- rotavirus detection, enzyme-linked immunosorbent assay 9011.
- rotavirus (human) detection, methodology comparison, man 9864.
- Salmonella* isolation, media (enrichment) 3617.
- Salmonella tyebering* isolates, identification, media (isolation), food poisoning, man 9921.
- Shigella flexneri*, media (isolation) 7251.

Subject Index

Feeding,

damage, *Rodentia*, blister rust, *Cronartium*, *Pinus* 2318.
Epilachna varivestis, *Cercotoma trifurcata*, regurgitation, disease transmission,
 southern bean mosaic virus, *Phaseolus vulgaris* 6738
 host plants, *Spiroplasma citri*, *Circulifer tenellus*, vectors 4920
 patterns, activated sludge, relationship, filamentous bacteria development,
 association, wastewater treatment 3476
 patterns, effects on glucose metabolism, microorganisms 6247.
 pigs, *Hordeum vulgare*, contamination, ochratoxin A, *Aspergillus ochraceus*,
 detoxification 7623.

Feeding behavior,

Aphididae, potato leaf roll virus, disease transmission, permethrin, deltamethrin
 effects on 8526.
Nematoda, plants, association viruses disease transmission 1121.

Feeding regimes,

cattle, *Gossypium hirsutum* seeds ammonification effects on cow's milk aflatoxin M1
 2945.

cattle, sewage sludge, microorganisms, food contamination, meat 4803.

Feeding trials,

animals, carbohydrates digestibility, fungi, yeasts 3853.
Candida utilis single-cell protein, immune response, gastrointestinal tract, pigs
 2929.

cattle, juveniles, pasteurized milk, *Staphylococcus aureus* 4869.

cattle, single-cell protein fatty acids, association cow's milk 250.

Halobacterium halobium lipids, use food additives, mice 245.

Penicillium commune, single-cell protein, rats, rabbits 4858.

Saccharomyces fragilis, single-cell protein, nutritive value, chickens 7808.

single-cell protein *Arthrobacter simplex*, effects on, hematology, organs
 histology, rats 8491.

Feeds,

additives, antibacterial agents, residues analysis, livestock 252.

aflatoxin B1 detection, gel chromatography 2067.

animals, fungi, mycotoxins, food contamination, fungicides use control 3865.

animals, *Trichoderma reesei* protein biosynthesis, use, sugar beets industrial
 wastes 8493.

animals, yeasts production, nitrate-reducing bacteria contamination 1085.

Beta vulgaris roots, fungi, patulin incidence 1089.

biomass conversion 7633.

by-products recovery, ethanol fermentation wastes, waste treatment 9803.

chickens, γ radiation effects on, disinfection, storage 8492.

contamination, aflatoxin B1, aflatoxicosis, pigs 3866.

contamination, bacteria, domestic animals 248.

contamination, fungi, fungi 4861.

contamination, bacteria, fungi, mycotoxins, animals, mycotoxicosis, conferences
 5455.

contamination, chickens, association *Aspergillus flavus* cyclopiazonic acid
 biosynthesis 8512.

contamination, fungi, mycotoxins, cattle sterility 4890.

contamination, microorganisms, toxins, quality control 4862.

contamination, mycotoxins, fungi 3868.

contamination, mycotoxins, high-performance liquid chromatography 4893.

contamination, mycotoxins, pigs, mycotoxicosis 4895.

corn, aflatoxins contamination, rats 8494.

crop residues, sheep, digestibility 4870.

diaminopimelic acid content, effects on rumen microorganisms bacteria, role,
 markers, production 6680.

fishery products, *Salmonella typhimurium* survival 3855.

Fusarium contamination, assays 4863.

hygiene, association mycotoxins contamination 4889.

lactic acid bacteria, effects on intestinal microflora, domestic animals 3850.

microorganisms distribution, radiation disinfection 7605.

mycotoxins, contamination, mycotoxicosis, domestic animals 9292.

Paecilomyces varioti proteins, allergenicity, occupational exposure, man 7607.

pigs, nutritive value, breweries activated sludge 5631.

pigs, *Streptococcus faecium* effects on intestinal microflora 4859.

preservation, isobutyric acid 5625.

preservation, propionic acid, antifungal activity, fungi, growth, monitoring
 1086.

preservation, 8-quinolinol treatment, fungi biodegradation 5630.

production, lignocelluloses, cellulolytic microorganisms biodegradation 9252.

Salmonella inoculation 253.

Salmonella isolates, serotyping 5627.

Salmonella isolation 3461.

silage, factors affecting nutritive value 2927.

single-cell protein nutritive value, production 9115.

syrops production, geranic acid effects on glucose fructose equilibrium,
Arthrobacter xyloso isomerase immobilized enzyme use 4864.

Torula additives, chickens 6682.

yeasts, protein composition, association, temperature 1087.

zearalenone contamination, assays 5644.

Feldspar,

potassium, nutrient sources, *Azotobacter* 7823.

Feline leukemia virus,

enzyme-linked immunosorbent assay, monoclonal antibodies 9850.

Feline panleukopenia virus,

combined vaccines, antibody response, dogs 3449.

Fenaminouafi,

Fragaria vesca red core disease control, agricultural practices association 1415.

Fenapenil,

resistance, *Bipolaris oryzae* 9633.

treatment, brown spot, *Drechslera oryzae*, *Drechslera sorokiniana*, *Zizania*
aquatica 2272.

Fenarimol,

disease control, *Venturia pinna*, scab, *Pyrus communis* 1395.

foliar applications, *Begonia*, powdery mildew, antifungal activity 1393.

powdery mildew control, *Rosa* 5044.

resistance, fungi, association domain cross-resistance 7022.

Fencibutrol,

hydroxylation, structure, *Aspergillus wentii* 1975.

Fenitrothione,

antibacterial activity, nitrogen-fixing bacteria, *Eichloria crassipes* isolates
 8770.

Fenpropanate,

disease control, *Rhizoctonia solani*, *Glycine max* 8625.

Fenpropimorph,

disease control, post-harvest decay, *Penicillium italicum*, oranges 4908.

Fenpropimorph, (continued)

disease control, white rot, *Conium versicolor*, pruning wounds, *Malus pumila*
 6873.

Fensulfiothion,

biodegradation, soil microorganisms 7538.

conversion, *Klebsiella pneumoniae*, fensulfiothion sulfide biosynthesis,
 accumulation 8367.

Fensulfiothion sulfide,

biosynthesis, accumulation, *Klebsiella pneumoniae*, fensulfiothion conversion 8367.

Fenvalerate,

disease control, *Rhizoctonia solani*, *Glycine max* 8625.

Ferbam,

quintazene, disease control, *Fusarium oxysporum*, bulbs, *Lilium* 1427.

Ferensimycin,

biosynthesis, *Streptomyces*, characterization 2567.

Fermentation,

acetic acid, *Acetobacter acetii* subsp. *acetii*, morphology, oxygen deficiency effects
 on 8197.

aeration, air filtration, sterility 7119.

air flow, filtration 9003.

alcoholic beverages, biochemical characteristics, *Saccharomyces cerevisiae*,
Candida valid 243.

alcohols production, yeasts 7517.

alcohols, use, grain, association, noncooking methodology 1045.

anaerobic bacteria, chemical selection, organic compounds, toxicity 8778.

anaerobic bacteria faeces, anaerobic bacteria, hydrocarbons production 5138.

analysis, computer applications 9239.

animal wastes, microorganisms, methane gas production, antibiotics effects on
 1039.

antibiotic 6643-X 1668.

Aspergillus niger, citric acid biosynthesis, molasses solution 5475.

Aspergillus niger, *Saccharomyces oviformis*, purification *Beta vulgaris* dyes 7470.

bacteria, amino acids production, genetic engineering 9117.

bacteria, crop residues, single-cell protein production 9110.

bacteria, effects on proteins, milk products production 4805.

bacteria, *Pentactinella macrophylla* seeds 6675.

bacteria, wine production 2053.

bacteria, 2,3-butanediol isomers production 7505.

bagasse, *Aspergillus terreus*, biosynthesis, cellulase, single-cell protein 1826.

batch culture optimization 9830.

beer, dimethyl sulfide role 8405.

beer, genetic engineering, yeasts 2859.

beer, yeasts, immobilized cells 3745.

beer, yeasts, measurements 6636.

beer, yeasts, reviews 3746.

beets, yeasts, ethanol production 7508.

Beta vulgaris, silage, lactic acid bacteria, inoculum, effects on 3854.

biotechnology, books 8179.

Blakeslee trispora, β -carotene, β -D-glucosidase, biosynthesis, cellobiose
 media (culture) 104.

broths, ethanol separation 9238.

butanol, *Clostridium acetobutylicum*, Silicalite, adsorption 4739.

butyric acid bacteria, mathematical models 9065.

Candida wickerhamii, glucose, cellobiose 7533.

cassava, detoxification, linamarase, *Aspergillus sydowii*, *Penicillium steckii*
 7778.

catalysts, technology, immobilized enzymes, immobilized cells 7337.

cattle colostrum proteins, *Streptococcus lactis*, effects on 246.

cellobiose, ethanol biosynthesis, *Dekkera intermedia* β -D-glucosidase
 purification, characterization 5513.

cellobiose, yeasts 4744.

cellobiose, yeasts, ethanol production 9226.

cellulodextrins, *Candida*, ethanol 2872.

cellulose, enhancement, *Clostridium thermocellum* + *Clostridium thermosaccharolyticum*
 mixed culture 9235.

cellulase, *Pestalotopsis versicolor* 9155.

cellulose, *Clostridium*, mixed culture 4747.

cellulose, ethanol production, *Penicillium funiculosum* + *Saccharomyces uvarum* 840.

cellulose, single-cell protein production, *Aspergillus terreus* 8205.

champagne, morphology, *Saccharomyces vini*, *Saccharomyces oviformis* 1990.

champagne, yeasts, organoleptic properties, fermenters 7520.

cheese, heat treatments, thiocyanate + hydrogen peroxide + lactoperoxidase effects
 4809.

citric acid, formation, gluconic acid, *Aspergillus niger* 1842.

citric acid, redox potential, *Aspergillus niger* 5469.

Citrus extracts, pyruvic acid biosynthesis, *Debaryomyces coudertii* 1822.

Claviceps paspali strains selection, alkaloids biosynthesis 6629.

Clostridium beijerinckii immobilized cells, isopropanol + butanol + ethanol 9241.

Clostridium beijerinckii immobilized cells, 2-propanol, butanol, ethanol 4737.

coffee, fungi 4432.

computer applications, monitoring 5362.

conferences, monitoring, computer applications 5456.

control, computer applications 1987.

control, computer applications 4467.

control, starch, yeasts, lactic acid bacteria 8412.

corn + animal wastes biochemical characteristics, microorganisms 4868.

corn, ethanol biosynthesis, batch culture, bacteria 134.

corn meals, bacteria effects on nutritive value 251.

crop residues, gases environments, *Aspergillus oryzae*, *Trichoderma reesei*,
Streptomyces, reviews 4723.

cytidine 5'-diphosphate choline, ATP, regeneration, *Hansenula jadinii* 1960.

dairy products, bacteria, fermentation, ethanol, volatiles acids 4853.

enzymes production 4678.

equipment, temperature, gases, assays 9825.

equipment, tetracycline biosynthesis parameters, *Streptomyces* 8871.

ethanol, β -glucanase effects on, *Bacillus* 1993.

ethanol, association, *Saccharomyces cerevisiae* immobilized cells, glycerol
 biosynthesis 127.

ethanol, association, sweet potatoes, use, *Endomycopsis fibuligera*
 exo-1,4- α -D-glucosidase 9230.

ethanol, brewing yeasts, characterization methodology 1049.

ethanol, by-products, immobilized cells, *Zymomonas mobilis*, *Saccharomyces bayanus*
 8396.

ethanol, carbon dioxide effects on yeasts 141.

ethanol, cellulase decomposition, yeasts, fungi 3753.

ethanol, corn, *Saccharomyces cerevisiae* 3811.

fermentation, (continued)

- ethanol, corn, temperature, effects on, *Aspergillus oryzae* 8395.
ethanol, evaporation, yield 8399.
ethanol, factors affecting, *Saccharomyces* 1048.
ethanol, growth conditions, continuous culture 8404.
ethanol, immobilized cells, reactors, mathematical models 3751.
ethanol, microorganisms 2861.
ethanol, *Pachysolen tannophilus*, galactose association 146.
ethanol, *Saccharomyces cerevisiae*, by-products inhibition effects on 9237.
ethanol, *Saccharomyces cerevisiae*, maintenance energy, biomass concentration, calorimetry 7528.
ethanol, *Saccharomyces cerevisiae*, *Saccharum officinale* crop residues, fermenters 2873.
ethanol, *Saccharomyces cerevisiae*, wood, acids, hydrolysates 4734.
ethanol, starch metabolism, yeasts 5570.
ethanol, wastes, waste treatment, by-products recovery 9803.
ethanol, yeasts 2044.
ethanol, yeasts computer applications 9228.
ethanol, yeasts, conferences 3640.
ethanol, yeasts, oxygen tension effects on 143.
ethanol, yeasts, technology 142.
ethanol, *Zymomonas mobilis*, efficiency 2857.
ethanol, *Zymomonas mobilis*, ethanol inhibition 7515.
factors affecting, reviews 1986.
filtration, air flow sterilization 8348.
food industry, China 3821.
fungi, reflectance I.R. radiation analysis 9227.
gentamicin biosynthesis, fermentation, aeration 7153.
gluconic acid, *Gluconobacter oxydans*, in vitro 8213.
glucose, analyzers, yeasts, methodology 4545.
glucose, *Clostridium acetobutylicum*, acetic acid, butyric acid, effects on 4726.
glucose, *Saccharomyces cerevisiae* immobilized cells, ethanol biosynthesis 137.
glucose, 2-keto-L-gulonate acid production, *Erwinia corynebacterium* 928.
glutamic acid, *Corynebacterium* growth association, relationship, carbon dioxide production 6381.
goats milk, starter cultures 9268.
gram-negative cocci, identification, methodology 2707.
heat, fungi, respiration, carbon sources 145.
heating, *Saccharomyces cerevisiae*, batch culture 1579.
hexadecane, biomass, monitoring, *Acetobacter calcoaceticus*, cell adhesion, methodology 5142.
hydrogen, methane, straw+food wastes substrates 5995.
L-idiol, *Candida* 9248.
induction, yeasts, factors affecting 8400.
industrial effluents, wastewater treatment, bibliographies 1694.
kinetics, bacteria recombinants, batch culture 1579.
lactic acid bacteria, milk+colostrom, food sources, juveniles, cattle 7599.
lactic acid bacteria, starter cultures, soybean milk 216.
lactic acid, lactic acid bacteria, vegetables 5607.
lactic acid, *Streptococcus*, milk products media methodology 5426.
lactic acid, tomatoes, *Lactobacillus plantarum* 4833.
Lactobacillus acidophilus, *Saccharomyces cerevisiae*, food wastes, antiviral activity 7595.
lactose, *Bacteroides polygrammus* 2864.
lactose, *Streptococcus lactis* mutants, starter cultures, cheddar cheese production 7570.
lignocellulose, *Trichoderma reesei* cellulase adsorption characterization 7530.
lincomycin monitoring, liquid chromatography 9765.
mathematical models, *Penicillium roqueforti* 3809.
media, yeasts separation techniques 9983.
media, yeasts separation techniques 9984.
methanogenesis reactors methodology 8716.
microbiology, conferences 909.
microorganisms batch culture, antibiotics biosynthesis 716.
microorganisms, genetic engineering, books 7276.
microorganisms, genetic engineering, reviews 6585.
milk, effects on vitamins 4854.
milk products, effects on lactose 4855.
mixed culture, *Hydrodictyon reboulatum*+*Tetraselmis*, environmental conditions effects on 2858.
mosses, *Saccharomyces cerevisiae* 1991.
monitoring, cycloheximide assays 9827.
Olea europaea, heat treatments, factors affecting, *Lactobacillus plantarum* 7x92.
olives, bacteria, food spoilage prevention 204.
Pachysolen tannophilus, xylose 7532.
penicillin, fungi, biomass measuring techniques, probes 9085.
penicillin, fungi growth monitoring, computer applications, media (culture) 9754.
penicillin, fungi growth monitoring, computer applications, media (culture) 9755.
pentoses, yeasts, ethanol production 4728.
potatoes rot effects on 8413.
production, antibiotics, enzymes, regulation, reviews 4675.
products, bacteria, glucose concentrations effects on 4551.
products, meat microflora, effects on behavior, *Candida* 2928.
proteinase, *Thermocardinomyces vulgaris*, growth, characterization 3701.
pure culture, fungi cellulose biodegradation 3775.
Saccharomyces bayanus, *Saccharomyces cerevisiae*, glucose substrates concentration, relationship, ethanol inhibition 2870.
Saccharomyces cerevisiae, ethanol, corn, factors affecting 8414.
Saccharomyces cerevisiae, ethanol, yield, polymers effects on 5573.
Saccharomyces cerevisiae immobilized cells, biomass measurements 7261.
Saccharomyces cerevisiae, relationship ethanol uptake 9246.
Saccharum officinarum, post-harvest decay, microorganisms 439.
sake, *Saccharomyces*, ethanol tolerance enhancement, Tween 80 role 9244.
sauerkraut, lactic acid bacteria, *Leuconostoc* 5608.
sausages, spices effects on *Lactobacillus plantarum* 2056.
silage, *Clostridium* growth inhibition, nitrate role 6681.
silage, fungi 5629.
silage, *Pediococcus acidilactici*, *Lactobacillus plantarum* 9282.
silage production, *Clostridium*, lactic acid bacteria 8490.
solid-phase methods, fungi cultures, sawdust, straw 8444.
soy sauce, *Aspergillus sojae* taxonomic significance 115.
starch, production, ethanol, selection, yeasts, strains 3756.
starch, *Zymomonas mobilis*, ethanol production 9233.
starter cultures, thermophilic bacteria, acidic curd cheese 8459.
Streptococcus mutans, association, formate acetyltransferase 1.

Fermentation, (continued)

- streptomycin, phosphate, release, *Streptomyces gneuse* 8003.
sucrose, *Clostridium* 2057.
sucrose, oxygen, uptake, carbon dioxide evolution, *Candida intermedia* 128.
sucrose, *Zymomonas mobilis* immobilized cells, levan production association 9192.
sugar, lactic acid bacteria, starter cultures, soybean milk 6674.
sugar, *Saccharomyces cerevisiae* petite mutant ability 9247.
sugars, ethanol production, biomass conversion, conferences 10010.
sugars, ethanol production, *Torulopsis holmii* 3747.
sugars, yeasts, biosynthesis, ethanol, glycerol 7525.
sulfur dioxide effects on, yeasts 1036.
technology, antibiotics production 5237.
technology, ethanol 7536.
Theobroma cacao beans, thermophilic fungi post-harvest decay 8601.
Theobroma cacao, methodology, effects on, temperature, acidity, food quality 3842.
tummy, regulation, hydrolase, phosphate, release 8038.
tummy, regulation, 3'-5'-cyclic-nucleotide phosphodiesterase, phosphatase 8037.
UMP+hexose, *Torulopsis candida*, UDPglucose production, UDPgalactose production, radioactive labeling 6575.
whey, *Aspergillus niger*, citric acid production 8196.
wine, *Leuconostoc oenos*, pH+sulfur dioxide, effects on 3761.
wine production, books 905.
wine, residues, *Saccharomyces* storage, biomass chemical composition 7512.
wine, role, *Leuconostoc oenos*, *Pediococcus*, pH 2867.
wine, *Saccharomyces cerevisiae*, foaming assays 3752.
wine, *Saccharomyces cerevisiae*, foams, protein composition 3754.
wine, *Saccharomyces cerevisiae* interaction *Leuconostoc oenos* 4742.
wine, *Saccharomyces oviformis*, *Botrytis cinerea* activators effects on 3760.
wine, *Saccharomyces*, role sterols 4743.
wine, temperature effects on 7531.
wine, use, cell culture, *Leuconostoc oenos* 4741.
yeasts, pure culture, hybridization selection, sulfur dioxide tolerance 147.
wort, atmospheric pressure effects on, *Saccharomyces cerevisiae* 9229.
wort, *Saccharomyces uvarum*, sulfur dioxide formation, dissolved oxygen effects on 7518.
xylose, ethanol biosynthesis, *Pachysolen tannophilus* 135.
xylose, glucose, *Pachysolen tannophilus*, nitrate, effects on 7534.
yeasts, ethanol production, analysis methodology 7524.
yeasts, ethanol production, models, reviews 7522.
yeasts, ethanol production, parameters 7523.
yeasts, flavor, beer 2862.
yeasts, genetic engineering 3744.
yeasts, phase variations, analysis, spectrometry 5433.
yeasts, wine 4739.
Zymomonas mobilis ethanol biosynthesis, fermentation, proteins+phospholipids complex use 144.
- Fermented food,**
books 907.
Fusarium proteins 5611.
- Fermented milk products,**
spilage, psychrotrophic bacteria, preservation, hydrogen peroxide+thiocyanic acid 6885.
- Fermenters,**
acetone, butanol, butanol, *Clostridium acetobutylicum* 119.
aeration, *Streptomyces aureofaciens*, tetracycline biosynthesis 8870.
agitation, *Aspergillus niger*, pelleting, morphology 6637.
batch culture, factors affecting, growth, *Vibrio cholerae* 2706.
+calorimetry, measuring techniques, microorganisms heat balance, in vitro 7215.
Candida oleophila biomass production, alkanes nutrient sources 7535.
Candida utilis growth, ethanol biosynthesis 138.
cellulolytic bacteria, cellulose conversion, methane production 8441.
cephalosporin C production, *Cephalosporium acremonium* 7994.
computers, data processing 9004.
continuous culture, *Zymomonas mobilis*, use, ethanol production 9245.
design, agitation 9002.
design, conferences 9100.
Lactobacillus delbrueckii, lactic acid production 11.
liquid culture, production, *Aspergillus niger* spores 1909.
mass transfer, relationship oxygen consumption 6288.
oxygen adsorption coefficients, energy consumption 8406.
Penicillium funiculosum, cellulase production 3677.
phototrophic bacteria, culture 3555.
Pseudomonas, methanol metabolism 6318.
Saccharomyces cerevisiae, ethanol fermentation, *Saccharum officinale* crop residues 2873.
sampling equipment, fungi, mycelia 9080.
sedimentation, biomass production, reviews 8083.
Streptococcus agalactiae growth, CAMP protein production 6398.
Sulfolobus acidocaldarius, sulfur removal, coal 3254.
Trichoderma aureoviride, β -D-glucosidase secretion 5511.
whey, fungal flora 3644.
yeasts, aeration 7519.
yeasts batch culture, oxygen application 5442.
yeasts, biomass production, pH effects on 4539.
yeasts, champagne fermentation, organoleptic properties 7520.
- carbon dioxide monitoring, computer applications 5361.
- Ferredoxin,**
amino acid sequence, *Desulfotomobium desulfuricans* 4552.
multiple forms, isolation, physicochemical properties, *Rhodospseudomonas capsulata* 7299.
purification, characterization, *Methanosarcina barkeri* 2741.
purification, characterization, *Rhodospseudomonas capsulata* 1833.
purification, characterization, *Thermoplasma acidophilum*, *Sulfolobus acidocaldarius*, *Desulfotomobium mobilis* 922.
purification, physicochemical properties, *Mycobacterium smegmatis* 3654.
Raman spectroscopy, *Halobacterium halobium* 4558.
- Ferric chloride,**
wastewater treatment, effects on activated sludge 4441.
- Ferrioxanide,**
reduction cytochrome b cytochrome c1 complex, *Saccharomyces cerevisiae* 7291.
- Ferrioxamine H,**
structure, actinomycetes 8387.

Subject Index

- Ferrous sulfate**, sodium metabisulfite, sodium pyruvate, media (culture), effects on, *Campylobacter fetus* subsp. *jejuni*, morphology, motility, viability 9974.
- Fertility**, *Hordeum spontaneum*, association disease resistance, fungi pathogens 6759.
- Fertilization**, *Acer pseudoplatanus* seedlings growth, effects on 531. agricultural land, nutrient availability, phosphate, humus complex, actinomycetes, fungi 9625. association, catalase activity, soil, USA, anaerobic bacteria 2382. effects on *Tuber melanosporum* fruit bodies production, *Quercus tanigoussa* 6899. forests, effects on fruit bodies production, *Basidiomycetes* 6907. mycorrhizas, nitrogen cycle, *Panicum coloratum* 1484. nitrogen cycle, soil, grasslands 9614. nitrogen, effects on mycorrhizas, *Pinus sylvestris* 3163. vesicular-arbuscular mycorrhizas effects on *Juniperus chinensis* var. *sargentii* 4134.
- Fertilizer applications**, ammonium, effects on *Triticum aestivum* take-all 1331. effects on nitrogen fixation, yield, *Arachis hypogaea* 6594. forests, population density, actinomycetes, *Fagus sylvatica* 8649. grasslands, soil properties, nitrification, denitrifying bacteria 8687. *Laccaria laricina* inoculation seedlings, *Pinus ponderosa*, *Pseudotsuga menziesii* 5852. leaf litter decomposition, forest floor, *Tsuga heterophylla* 6897. nitrogen, crops, uptake, competition, soil microorganisms 599. nitrogen oxide production, denitrification, soil properties, grasslands 6995. phosphorus, effects on, nitrogen fixation, *Leguminosae* 517. phosphorus, effects on nodulation, nitrogen fixation, *Ingia inquil* 7843. urea, nitrogen sources, soil microorganisms, nitrification 5968. Zea mays stalk rot, effects on 1197.
- Fertilizers**, agricultural practices, effects on incidence, *Gaeumannomyces graminis* var. *tritici*, take-all, *Triticum aestivum* 9361. content, nitrogen, phosphorus, potassium, effects on *Phytophthora nicotianae* var. *parastica* buckeye rot, *Lycopersicon esculentum* 9445. denitrifying bacteria, denitrification 3246. effects on, cellulose biodegradation, cellulolytic microorganisms, crop fields 5982. effects on, soil microorganisms, decomposition, organic matter 5979. induction, pathogenicity, *Glomus*, association, liquidambar *styraciflua* 6971. nitrogen, effects on *Leguminosae* nitrogen fixation 5105. nitrogen, effects on, mung bean mild mosaic virus pathogenicity 8534. nitrogen, effects on *Trifolium repens* nitrogen fixation, yield 2364. nitrogen, fungicides, disease control, mildew, brown rust, *Hordeum vulgare* 5838. organic compounds, *salmonella* contamination 1732. phosphate, uptake, growth, *Lolium rigidum*, *Trifolium subterraneum* 9547. phosphorus, effects on nutrient uptake, role, vesicular-arbuscular mycorrhizas, *Medicago sativa*+*Rhizobium meliloti* nodulation 6943. role, *Salmonella* food contamination 7571. *Salmonella* incidence, association, animals feces 2637. slurries, +*Rhizobium*, inoculation, seedlings, coal mines 8691. soil amendment, soil microorganisms, enzymatic activity, redox potential, paddy fields, *Oryza sativa* 9623. stimulation incidence, *Ustilago maydis*, smut, *Zea mays* 9324. sulfur, effects on, *Rhizobium* nodulation, *leguminosae* roots ethylene biosynthesis 1503. use, *Azotobacter*, nitrogen fixation 607.
- Fertilizers (slow release)**, soils (loam), *Triticum*, effects on, nitrification, uptake, yield 621.
- Festuca arundinacea**, accumulation, *Epichloe typhina*, N-acetyl-loline, N-formyl-loline 7499. disease reservoirs, barley yellow dwarf virus, disease transmission, role, *Schizaphis graminum*, *Rhopalosiphum padi*, USA, Missouri 1164. pathogenicity, *Rhizoctonia zeae* 5701. plant breeding, disease resistance, crown rust, *Puccinia coronata* 448. seeds, infection, *Acremonium coenophialum*, detection methodology 9077.
- Festuca rubra**, soil fertility, relationship *Laetisaria fuciformis* infection 9357.
- Fetal calf serum**, cell culture association, *Chlamydia trachomatis* isolation methodology 9961.
- Fibers**, viruses DNA separation techniques 1739.
- Fibrin**, polymerization, bacteria trapping 2698.
- Fibrinogen**, hemagglutination, use, *Staphylococcus aureus* identification 844.
- Fibrinolysis**, *Streptomyces rimosus*, proteolytic enzymes 1947.
- Fibroblasts**, herpes simplex virus infected, thymidine effects on 9-(2-hydroxyethoxymethyl)guanine antiviral activity 7942. mice, resistance, *Amanita phalloides*, *phallotoxins* 5502. Moloney sarcoma virus transformed cells, growth, interferon inhibition 3369. prostaglandins, inhibition, vaccinia virus, replication, cell culture 2485.
- Fibroporia angulopora sp. nov.**, brown rot, *Pseudotsuga menziesii* 8650.
- Ficin**, *Pseudomonas cocovenenans* bongkrekic acid inhibition 2079.
- Ficus carica**, fruit rot, disease control, fungicides 1396.
- Ficus erecta**, leafspot, *Pseudomonas ficuserectae* sp. nov. 7715.
- Field trials**, *Bacillus thuringiensis*, biological control, *Culicidae* 1030. *Bacillus thuringiensis*, biological control, *Smulium soubrense-sanctipauli* 1026. *Fusarium solani* root rot, *Cyamopsis tetragonoloba* 5676. *Phytophthora infestans*, disease spread, *Solanum tuberosum*, mathematical models 8593. *Triticum*, brown rust, stripe rust, gemplasm screening, disease resistance development, India 5726. *Verticillium albo-atrum*, virulence, *Medicago sativa*, Europe, comparison, North America 8558.
- Fields**, *Rubus idaeus*, raspberry bushy dwarf virus infection 9441.
- Filamentous bacteria**, development, relationship, activated sludge feeding patterns, association, wastewater treatment 3476.
- Filamentous microorganisms**, bioreactors, activated sludge treatment, chemicals wastes 9804. incidence, activated sludge 8974. penicillin fermentation models, computer applications 9756.
- Films**, activated sludge, ultrasound separation, bacteria, counting methods 8933. bacteria, fouling organisms, cooling water, industrial water systems 6257. cellulose, *Saccharomyces cerevisiae*, immobilized cells, ethanol, production 6633. digestion (anaerobic), wastewater treatment, methanogenesis 8957. effects on, filters, pressure, wastewater treatment 4443. food, *Escherichia coli*, *Salmonella typhimurium*, viability, surfaces, refrigeration 2025. formation, factors affecting 1707. formation, growth conditions, effects on, *Pseudomonas putida*, methodology 2668. formation, role, filtration, *Oryza sativa*, wastewater treatment 4444. nitrification, mathematical models, reactors 8057. oxygen barriers, beef vacuum packaging, bacteria food contamination 261. permeability, vacuum packaging, beef spoilage, *Lactobacillus* 5635. sewage treatment, microorganisms distribution, models 8948. sewage treatment, models 8949. steel surfaces corrosion, aquatic microorganisms, fouling organisms, sea water 1055. tubular flow systems, fouling organisms, quantitation 5316. waste water, formation, structure, electron microscopy 7193. wastewater treatment membrane filtration fouling organisms, bacteria, characterization 3465.
- Filobasidiella neoformans**, perfect state, *Cryptococcus neoformans*, media (culture) 4538.
- Filter paper**, methodology, hemagglutination inhibition, measles virus 9859. methodology, hepatitis B virus infection markers detection 3524.
- Filters**, activated carbon, bacteria growth, organic compounds decomposition, wastewater treatment 8956. anaerobic microorganisms, wastewater treatment, coal gases 8952. fluorescence, bacteria, measuring techniques, milk 6673. gentamicin binding, membrane filtration, enzymes inactivation 5258. poliovirus adsorption, salts effects on 3469. sand, effects on septic tanks denitrification 786. surface charge, viruses recovery, drinking water, sewage 8096. wastewater treatment, films, effects on, pressure 4443.
- Filtration**, air flow, fermentation 9003. air flow, sterilization, fermentation 8348. air, sterility, aeration, fermentation 7119. beer, yeasts counting methods, fluorescence 2869. +circulation, blood isolation methodology, anaerobic bacteria, bacteremia 9946. films, formation, role, *Oryza sativa*, wastewater treatment 4444. nucleotides, high-pressure liquid chromatography, bacteria 876. virus, enterovirus contamination, methodology 3520. wine, sterilization, methodology 3861.
- Finger**, man, contamination, *Salmonella* carriers 2703.
- Oral hygiene association**, dental caries, mental retardation, children 8079. soil, nitrogen cycle, N-(phosphonomethyl)-glycine effects on 5972. urinary tract clinical isolates, drug resistance, trimethoprim, transfer 9654.
- Fireblight**, *Erwinia amylovora*, bactericides, disease control, *Pyrus* 1207. *Erwinia amylovora*, buds, *Malus pumila* 1225. *Erwinia amylovora*, disease resistance, control, fungicides, screening, seedlings, *Malus pumila* 1406. *Erwinia amylovora* isolation, Rosaceae, characterization 419.
- Fires**, effects on nitrogen fixation, *Leguminosae* 517.
- Fish products**, preservation, *Welleima sebii* biodegradation 2045.
- Fisheries**, waste treatment, bioreactors 8930.
- Fishery products**, bacteria contamination, Kenya 3837. bacteria food contamination, U.V. radiation treatment 4849. feeds, *Salmonella typhimurium* survival 3855. food contamination, proteolytic bacteria, counting methods 3808. storage conditions, carbon dioxide, nitrogen, temperature, effects on, *Pseudomonas*, *Moraxella*, *Lactobacillus* 8498. *Xiphias* gladius, packaging, contamination, *Lactobacillus*, *Pseudomonas*, chemicals 4808.
- Fistulina hepatica**, *Quercus* decay, economic importance, Czechoslovakia 4163.
- Fittonia verschaffeltii**, leafspot, *Myrothecium roridum* 5747.
- Fixation**, materials methodology, *Saccharomyces cerevisiae* immobilized cells 4513. methodology, microorganisms, mucus 3514.
- Flagellin**, c-N-methyllysine levels, *Proteus morganii* 5476.
- Flagellospora curvula**, biodegradation, *Populus tremuloides*, leaf litter 8045.
- Flammulina velutipes**, nutritive value, digestibility, man 5615.
- Flavin**, mycobacterium smegmatis, derivatives reconstitution lactate 2-monooxygenase, oxidation decarboxylation lactic acid 6502.
- Flavioia**, biosynthesis, *Phoma wasabiae* 1823.
- Flavobacter**, symbiosis, algae, photosynthesis, starch biosynthesis 3708.
- Flavobacterium**, epoxides production 2840. R factors, animal isolates, *Pisces* 3275. pathogenicity effects on, *Beta vulgaris* crop production 403.

avobacterium, (continued)

production, deacetoxycephalosporin C, isolation 1609.
avobacterium dehydrogenans,
 pregnenolone triacetate conversion 17 α ,21-dihydroxy-pregn-4-en-3,20-dione,
 pregnenolone triacetate conversion hydrocortisone-17 α -acetate 5529.
avobacterium dormitalor,
 endo-1,3(4)- β -D-glucanase hisidine residues, chemical modification,
 photooxidation effects on activity 6477.

avobacterium heparinum,

nutrient sources, regulation, production, heparin lyase 969.

avobacterium keratolyticus,

endo- β -D-galactosidase, purification, characterization 6451

avobacterium uliginosum,

marnactan biosynthesis, isolation, characterization, antifungal activity 7452.

avocytochrome b2,

biosynthesis, Hansenula anomala, oxygen effects on 5473.

avodoxin,

riboflavin 5-phosphate mobility, N.M.R., Megasphaera elsdenii 7302.

avofungin activity, Botrytis cinerea, Cladosporium herbarum 2283.**avoprotein-linked monooxygenase**,

Bacillus megaterium, induction 8322.

Pyricularia oryzae, biodegradation IBP 5590

avor, champagne, yeasts additives 5572.

milk, Lactobacillus activity, threonine aldolase, alcohol dehydrogenase, effects on 7587.

single-cell protein, Basidiomycetes 9113.

wine, yeasts alcoholic fermentation, Banksia integrifolia berries oils

composition effects on 6639.

avor compounds,

Allium, induction, sclerotia formation, Sclerotium cepivorum 4001.

induction, encapsulation, Streptococcus lactis var. mitalgenes 9217.

avibacter,

N-acylaminosulfonates, purification methodology 4509.

avoculants,

bacteria, water treatment 9800.

chemicals, effects on digestion (anaerobic), cheese whey 9809.

size reduction, wastewater treatment 9806.

avoculation,

activated sludge, relationship ATP levels 9799.

drinking water, rotavirus (simian) concentration 3538.

Streptomyces griseofuscus, immobilization, γ radiation effects on 7250.

Thiopia rosea, lagoons, anaerobic conditions, sewage effluents 8064.

yeasts, cell aggregation, assays 7263.

avocled soils,

biodegradation, herbicides, MCPB 5971.

biodegradation, herbicides, molinate, soil types, pathway 5886.

paddy fields, sulfate-reducing bacteria, sulfur, nutrient cycles 6958.

soil microorganisms, biodegradation, carbaryl, pesticide residues, nutrient

requirements 9620.

soil microorganisms, denitrification, respiration, redox potential 6957.

avocles on bacteria activity, oil deposits 627.

oil deposits, relationship, hydrogen bacteria activity, population dynamics 2387.

soil, iron reduction, metabolism, bacteria 6959.

soil microorganisms decomposition, nutrient dynamics, Acer rubrum leaf litter

4194.

avocles,

forests, nutrient dynamics, litter fall decomposition, USA, Illinois 6890.

avocles,

education institutions, keratinophilic fungi isolation 8983.

avocles,

milk, Escherichia coli, Pseudomonas fluorescens, β -casein biodegradation

2020.

avocles,

food contamination, aflatoxin B1, aflatoxin B2, citrinin 277.

food contamination, aflatoxin B1, citrinin 276.

wheat <microorganisms production lysine, nutritive value, rats 5632.

avocytometry,

methodology, clinical microbiology, Escherichia coli, DNA 6339.

avocyls,

Aspergillus, Fusarium moniliforme air spora contamination 9414.

avocyls,

effectors on Rhizoctonia solani, damping-off, Vigna unguiculata 9482.

avocylacillin,

+cephalexin, antibacterial activity, infection treatment, man 6132.

avocyls,

antibiotic sensitivity testing, yeasts 2502.

avocyls,

antifungal activity, Dematiaceae 7929.

avocyls,

rumen, cattle, bacteria proteins determination methodology 5408.

avocyls,

antibacterial activity comparison, pefloxacin, nalidixic acid, pipemidic acid

8761.

avocyls,

antibacterial activity, Neisseria gonorrhoeae 2425.

avocyls,

effects on Aureobasidium pullulans pullulan biosynthesis 6571.

avocyls,

substituted, amino acids derivatives, murine leukemia virus 8799.

avocyls,

conjugation, monoclonal antibodies, Chlamydia trachomatis detection, McCoy cells

9923.

avocyls,

α -amylase, dextranase, poly(anions) inhibition, Bacillus subtilis 79.

1-anilino-8-naphthalenesulfonic acid interaction UDPglucose 4-epimerase,

Saccharomyces fragilis 5494.

assays, 6-aminopenicillanic acid 3406.

association, Allium cepa infection, Botrytis allii, Colletotrichum coccinens,

factors affecting 8584.

counting methods, yeasts, beer 2869.

cytochrome c folding kinetics, structure intermediates, Saccharomyces cerevisiae

4559.

detection, Septoria nodorum, seed-borne diseases, Triticum aestivum 1190.

Fluorescence, (continued)

diagnosis, coccidioidomycosis, candidiasis, aspergillosis, histoplasmosis,

tissues 4525

diagnosis, mycoplasma-like organisms, stunt, Apium 2166.

filters, bacteria, measuring techniques, mik 6673.

folding kinetics, cytochrome c iodoacetamide chemical modification,

structure-activity

+high-performance liquid chromatography, coenzyme F420 assays, methanogenic

bacteria, sewage sludge 9021.

identification, Corynebacterium diphtheriae clinical isolates 6312.

immunoassays, dibekacin 9785.

immunoassays, monoclonal antibodies, gentamicin 9763.

immunoassays, vancomycin 9784.

laccase Polyporus versicolor 7366

+membrane filtration, counting methods, bacteria 1798.

membrane filtration, counting methods, fungi, bacteria, food contamination 178.

microscopy, Brassica campestris, pathogenesis, Aspergillus amstelodami,

Penicillium verrucosum var. cyclopium, Verticillium lecanii 2188.

microscopy, detection, brown rot fungi, Pinus palustris decay 4047.

microscopy, soil microorganisms colonization, Colletotrichum sativus, conidia,

hyphae 3625.

self, fungi, use, detection, tissues 8156.

staining, detection, Chlamydia trachomatis 3619.

staining, fungi, ethidium bromide, methodology 2720.

subtilisin conformation, Bacillus subtilis 90.

subtilisin conformation, pH, urea effects on, Bacillus subtilis 89.

tetrahylolate dehydrogenase interaction methoxytrexate analogs, Lactobacillus

casei 2801

tryptophan synthase quaternary structure, Escherichia coli 1871.

Fluorescence polarization,

streptomycin, immunoassays 6156.

Fluorescent antibody test,

detection, antigens, rinderpest virus, methodology, diagnosis, cattle 830.

detection methodology, herpes simplex virus infection tissue culture 9839.

diagnosis, syphilis, congenital infection, man 863.

identification, bacteria clinical isolates, clinical microbiology 834.

immunodiagnosis, syphilis 9918.

leprosy subclinical infection detection, man 847.

Rhizobium trifolii, colonization roots, Trifolium alpinum 6991.

use, detection, Ceratocystis ulmi phytotoxins, Ulmus 4167.

Vibrio cholerae, identification 842.

Fluorescent probes,

detection Mycoplasma contamination, viruses culture collections 6293.

methodology, pH topography, Endomyces magnusii 8169.

oligonucleotide binding DNA 8013.

RNA labelling, use phase 74 polynucleotide synthetase (ATP) 9833.

Fluoridation,

prophylaxis, dental caries, children 6283.

Fluoride,

applications, association, dental caries, gingivitis, children 8076.

dentifrices, dental disorders prophylaxis, bacteria 812.

dentifrices, antibacterial activity, dental caries, man 3504.

dentifrices, mouthwashes, prophylaxis, dental caries, man 8986.

man, effects on Streptococcus mutans, dental plaque, saliva 3502.

mouthwashes, dental caries prevention, man 3501.

tablets consumption, children 9000.

topical application, dental caries prophylaxis, teeth, man 8996.

topical application, prophylaxis, dental caries, man 8992.

topical applications, dental caries prophylaxis, children 5352.

topical applications, man, dental hygiene equipment 5354.

trement, dental caries prophylaxis, topical application, teeth, man 8995.

treatment, dental caries, children, dental hygiene, long-term effects 3499.

treatment, dental caries prophylaxis, children 8081.

varmishes, use, dental caries prophylaxis, animal models 8994.

water treatment, fluorosis, dental caries, children 8077.

Fluorine,

derivatives, sporaric A, synthesis 8876.

organic compounds, oxygen supply, microorganisms immobilized cells 6286.

1-(2'-Fluoro-2'-deoxy- β -D-arabinofuranosyl)thymine,

antiviral activity, herpes simplex virus 1, herpes simplex virus 2, Vero cells

7096.

2-Fluorocitric acid,

enantiomers, citrate (pro-3S)-lyase inactivation, bacteria 7708.

5-Fluorocytosine,

antifungal activity, mechanisms, Candida albicans 4298.

antifungal agents, interaction, antifungal activity 1567.

drug sensitivity testing, media methodology, Candida, Torulopsis 897.

fungi susceptibility, association allopurinol 8790.

resistance, Candida albicans clinical isolates 1528.

7-Fluoromethyl-1,8-naphthylidene,

antibacterial activity 2427.

7-Fluoromethyl-1,8-quinoline,

antibacterial activity 2427.

Fluorometry,

adenosinetriphosphatase, hydrodynamics, thermophilic bacteria 1879.

methodology, bacteria identification 9044.

1-nitrotyrosine reductase assays, Salmonella typhimurium 5021.

Fluorometuron,

soil amendment, effects on soil microorganisms, fungi 2379.

Fluorosis,

dental caries, fluoride water treatment, children 8077.

5'-p-Fluorosulfonylbenzoyl adenosine,

coupling factor 1 chemical modification, mitochondria, Saccharomyces cerevisiae

943.

5-Fluorouracil,

derivatives, antibacterial activity, Escherichia coli 9663.

drug resistance, role transport, Candida utilis 642.

Foaming,

assays, Saccharomyces cerevisiae fermentation, wine 3752.

Foams,

protein composition, Saccharomyces cerevisiae, fermentation, wine 3754.

suppressors, effects on Streptomyces rimosus morphogenesis 684.

suppressors, effects on Streptomyces rimosus oxytetracycline, biosynthesis 1639.

Foliage,

fungi pathogens, humidity chambers 4523.

Subject Index

Foliar application,

Beauveria bassiana conidia, *Solanum tuberosum* leaves, pathogenicity, *Leptinotarsa*
deceimlineata, bioassays, biological control 7482
fungicides, Glycine max 7749

Foliar applications,

biological control, pathogens, *Arthropoda* 991
fungicides, Begonia, powdery mildew, antifungal activity 1393
fungicides, disease control, *Citrus pandis* greasy spot 5834
fungicides, disease control, plant diseases 8636
fungicides, disease control, *Tilletia controversa* bunt, *Triticum aestivum* 4111
nirrate, effects on, *Glomus mosseae* symbiosis, *Zea mays* 4204
pathogens, biological control, pest control, *Insecta* 993
pathogens, pest control, biological control, crop fields, *Insecta* 992

Foliar diseases,

blight, *Polyscias fruticosa* 3090

Folic acid,

content, foods, measuring techniques, use, *Lactobacillus casei* 7238
pathway, cotrimoxazole, antibacterial activity 6033
serum levels, man, *Lactobacillus leichmannii* use, bioassays 885

Folpet,

use, leafspot disease control, *Dioscorea dumetorum* 5061

Fomajorin D,

Fomes annosus, structure 6584

Fomajorin S,

Fomes annosus, structure 6584

Fomannosine,

biosynthesis, *Fomes annosus* 6717

Fomannoxin,

production, *Fomes annosus*, toxicity, seedlings, *Picea sitchensis* 6914

Fomecin A,

synthesis, antibacterial activity, antifungal activity 2579

Fomecin B,

synthesis, antibacterial activity, antifungal activity 2579

Fomes annosus,

control, use, *Trichoderma harzianum* lytic enzymes 4156
fomajorin S, fomajorin D, structure 6584
fomannosine biosynthesis 6717
fomannoxin production, toxicity, seedlings, *Picea sitchensis* 6914
growth, ozone effects on 541
root rot, mortality, *Abies*, forests 5075

Fonotea,

pesticide applications, pesticide residues, soil characteristics, effects on soil
microorganisms 8705

Fonsecaea pedrosi,

media (culture) 6344

Food,

bioassays, detection, mycotoxins, fungi 2939
Chromobacterium isolation, water, soil 2041
cold storage, preservation, association lactic acid bacteria 260
contamination, public health, man 5285
Enterobacteriaceae incidence, Mexico 7594
films, *Escherichia coli*, *Salmonella typhimurium*, viability, surfaces,
refrigeration 2025
growth, *Salmonella typhimurium*, *Staphylococcus aureus*, mathematical models, water
activity 8468
infants, contamination 2031
infants, contamination, *Bacillus cereus*, *Staphylococcus*, toxigenicity 8464
isolates, *Staphylococcus aureus*, enterotoxin production 1113
isolates, *Yersinia enterocolitica*, pathogenicity 2048
isolation, *Sporolactobacillus* methodology 7565
packaging, plastics, association, microorganisms contamination 1094
Plesiomonas shigelloides isolation 3824
preservatives effects on, *Staphylococcus aureus*, survival 6683
preservatives glycerol 271
production, use, fungi, reviews 5443
Salmonella isolation incidence, British Isles 1075
space flight, relationship, *Hansenula polymorpha* carbohydrate composition,
association, carbon dioxide recycling, nutrient requirements 8486
taints, role, psychrotrophic microorganisms 2909
use, safe like flavonoids 4780
vacuum packaging, food contamination, conferences 5460,
wastes, *Lactobacillus acidophilus*, *Saccharomyces cerevisiae*, fermentation,
antifungal activity 7595
wastes, - straw substrates, methane hydrogen fermentation 5995
water content, microbiology, methodology 4831

Food additives,

effects on *Staphylococcus aureus* growth 8469
food contamination microorganisms 257
Halobacterium halobium lipids, feeding trials, mice 245

Food consumption,

man, oysters, gastroenteritis, Norwalk agent food poisoning 1072

Food contamination,

afatoxin B1, aflatoxin B2, citrinin, fruit 277
afatoxin B1, fruit 276
afatoxin M, dairy products, cattle 2938
aflatoxins, corn, peanuts, high-pressure liquid chromatography detection 3883
aflatoxins, corn USSR 5652
aflatoxins, Egypt 4885
aflatoxins, plants, detection methodology 6688
Alteromonas putrefaciens, *Pseudomonas putrefaciens*, beef, minced meat 3841
animals feeds, mycotoxins, fungi, fungicides use control 3865
animals, *Salmonella* isolation, culture methodology 1088
Aspergillus versicolor, radiosensitivity 8787
association, antibiotics administration, long-term effects 7586
association, *Escherichia coli* infection, man, diagnosis 2054
association, *Staphylococcus aureus* detection, media (selective) methodology 5416
Bacillus cereus, *Clostridium perfringens*, growth, beans 219
bacteria, beef, electrical stimulation 185
bacteria, beef, pork, temperature effects on 241
bacteria, beef vacuum packaging, oxygen barriers films 261
bacteria, carbon dioxide detection, I.R. radiation use 4851
bacteria, carcasses, meat industry, Norway 5618
bacteria, chickens, abattoirs 2034
bacteria, cooking, kitchens 235
bacteria, eggs, temperature effects on 3844
bacteria, enumeration, centrifugation 3581

Food contamination, (continued)

bacteria, enumeration equipment 3575
bacteria, food poisoning, man, disease control 3496
bacteria, fungi, conferences 5453
bacteria, fungi, counting methods, membrane filtration, fluorescence 176
bacteria, ham 3832
bacteria, hygiene, prevention, intoxication, man 194
bacteria, ice cream 238
bacteria, identification, gas chromatography 236
bacteria, indicator species, conferences 5454
bacteria levels, freeze-thawing effects on, curing, ham 182
bacteria, meat 3833
bacteria, milk, conferences, 5458
bacteria, packaging, beef 224
bacteria, pork - cooking, kitchens 232
bacteria ripening, salami 2030
bacteria sanitation, cooking, kitchens 213
bacteria, spoilage, packaging, seafood 2935
bacteria, spoilage, poultry cooking kitchens 1067
bakery products, yeasts, water effects on antimicrobial agents 240
beans sprouting, *Salmonella*, fungi 3831
beef, salmonellosis, man, epidemiology, plasmids characterization 8472
Campylobacter fetus, reviews subsp.jejuni 173
Campylobacter fetus subsp. jejuni, meat, animals carcasses 1090
Campylobacter fetus subsp. fetus, most probable number, poultry, milk 231
Campylobacter fetus subsp. jejuni 8456
Campylobacter fetus subsp. jejuni, chickens, abattoirs 2925
Campylobacter fetus subsp. jejuni, chickens carcasses 1082
Campylobacter fetus subsp. jejuni, ententes, man epidemiology, Sweden 2055
Campylobacter fetus subsp. jejuni, livers, chickens 9277
Campylobacter fetus subsp. jejuni, milk, man, ententes 1078
Campylobacter, isolates 192
canned products, *Geotrichum*, counting methods 4776
cereals, *Penicillium vindictatum*, media (selective) 7269
cheese, enumeration 4797
cheese products, *Clostridium botulinum*, toxins production 2943
cheese *Salmonella*, *Staphylococcus aureus* 8487
chickens carcasses, Enterobacteriaceae, *Salmonella*, radiation, temperature,
effects on 4786
chickens carcasses, *Salmonella*, detection methodology 1077
chickens eggs, *Clostridium perfringens*, Enterobacteriaceae, *Staphylococcus* 187
Clostridium botulinum toxins 7637
Clostridium perfringens, meat products, Chile 208
Clostridium perfringens, *Staphylococcus aureus*, pork, cooking, kitchens 1066
cold storage, microorganisms 242
control, association, microorganisms colonies, enumeration methodology 3585
corn, assays aflatoxins, airborne particulates 4886
corn, wheat, storage, *Aspergillus* 443
Crasostrea gigas, association, water pollution, phytoplankton, aquaculture 2924
dairy products, Enterobacteriaceae media (isolation) 1791
dairy products, confectionery, coliforms fecal coliforms 9276
dairy products, *Escherichia coli*, coliforms, recovery 4817
dairy products, psychrotrophic bacteria, heat resistance, incidence,
identification 4814
diarrhea, emetics association, *Bacillus cereus* spores, germination, heat
resistance association man 193
Escherichia coli, cheese production, factors affecting survival 4856
Escherichia coli, isolation methodology, effects on pathogenicity, assays 177
Escherichia coli, role, disease transmission, diarrhea, children, Bangladesh
4847
fishery products, bacteria, U.V. radiation treatment 4849
food vacuum packaging, conferences 5460
fruit juices, yeasts, Venezuela 7574
fruits products, molds, counting methods 4775
fungi, chitin levels indicators 3819
fungi, fruit juices, surveys 225
gram-negative bacteria, milk, Limulus lysate test use detection food quality
8484
Gramineae, post-harvest decay, fungi 2236
Gramineae, 4-deoxyxynvalenol 6687
ice cream, quality control, food industry 259
ice cream, *Staphylococcus aureus*, *Salmonella*, coliforms 6659
ice cream, *Staphylococcus*, coliforms, psychrotrophic bacteria 7567
indicator species, spraying, drying, milk 4875
infectivity tests, *Salmonella* inoculation, feeds 253
Lactobacillus casei folacin, chromatography 4781
lunchmeat meat, *Bacillus*, micrococci, *Streptococcus*, factors affecting spoilage
2029
man, association, salmonellosis, sheep 3845
meat 196
meat 197
meat, antimicrobial activity, sorbic acid 4810
meat, *Clostridium botulinum*, factors affecting growth 4790
meat, microorganisms, enumeration methodology 3613
meat, microorganisms, sampling methodology 9006
meat, microorganisms, sewage sludge feeding regimes, cattle 4803
meat processing, bone, contamination, microorganisms 4783
meat production, microorganisms 199
meat, *Staphylococcus aureus*, phage typing 2920
microorganisms, counting methods 4841
microorganisms, dairy products, hygiene control 4846
microorganisms, effects on rice composition 7588
microorganisms, food additives 257
microorganisms, meat products quality control 7566
microorganisms, pistachios, ice cream production, association, radiation
treatment 4838
microorganisms standards 3849
milk production, microorganisms, Poland 4785
milk products, standards, counting methods, methodology 3805
minced meat, Campylobacter fetus subsp. jejuni, media (selective) 1071
mycotoxins, cereals, reviews 1099
mycotoxins, control programs, standards 6694
mycotoxins incidence, British Isles 3878
oils, aflatoxin B1, assays 275
pathogenicity *Yersinia enterocolitica* 174
pecans, aflatoxins, weather effects on USA 6672

food contamination, (continued)

- potatoes processing sterilization packaging 4801
 poultry *Campylobacter fetus* subsp. *ejuni* incidence 3840
 protection, bacteria, vegetables 2918
 proteolytic bacteria, fishery products, counting methods 3808
 proteolytic bacteria, spoilage, seafood 3825.
 Proteus, detection methodology 5617.
Pseudomonas aeruginosa, milk, meat, pH effects on 4795.
 psychotropic bacteria, milk, dairy products, reviews 226.
 rice, food processing, canning 256
Salmonella, *Campylobacter fetus* subsp. *ejuni*, poultry, meat industry 6663.
Salmonella, cooked poultry 4807.
Salmonella, fertilizers role 7571.
Salmonella pork sausages 179.
Salmonella, poultry 3830.
Salmonella *Staphylococcus aureus*, liquids egg production 203.
 salmonellosis control programs, man 230
 sanitation, food industry, books 4549.
 sausages, coliforms, detection methodology 4819.
 sausages, *Salmonella*, isolation, media (enrichment) 4766.
 seafood, bacteria, quality control, resazurin test 3374.
 seafood toxicity, *Vibrio cholerae*, man 1070.
 seafood viruses bacteria 8466
 spoilage lauridin, preservatives meat products 270
 standards, sampling 212.
Staphylococcus aureus deoxyribonuclease detection, heat stability 9278.
Staphylococcus aureus, seafood, food processing hygiene 3858
Staphylococcus enterotoxigenus, detection enzyme-linked immunosorbent assay 1110
Staphylococcus indicators, endotoxins, deoxyribonuclease 1 coagulase 3810
Staphylococcus milk products, India incidence 2058
 wine, *cholerae*, biotyping, growth 3835.
Vibrio cholerae, pasteurization, cooking, oysters 2912.
Vibrio parahaemolyticus, oysters 2910.
Yersinia enterocolitica detection, enumeration, DNA hybridization methodology 9049
Food industry.
 cultivation, *Basidiomycetes* 2047
 fermentation, China 3821
 food-borne diseases, quality control 7575
 heat exchange cleaning systems, bacteria contamination 4784
 ice cream, quality control, food contamination 259
 industrial effluents, treatment methodology reviews 792
 industrial wastes, single-cell protein production, economics 9108
 industrial wastes, single-cell protein production, *Fusarium*, *Sporothium* 9112
 phosphate, food contamination, *Bacillus* (hydrogen chloride), use biocides 2450
 sanitation, food contamination, books 4549
 single-cell protein feeding trials 9284
 sugars, contamination bacteria, fungi 184
Food poisoning.
 bacteria histamine biosynthesis 121.
 bread, contamination, *Aspergillus fumigatus* mycotoxins, man, neurological complications 2947.
Clostridium perfringens, pasta, kitchens hygiene, man 7576.
 ergot *Claviceps purpurea*, reviews, man 1074.
Escherichia coli enterotoxins, man, reviews 1104.
 man, books 10002
 man, *Clostridium perfringens* toxins USA 2958
 man, food contamination, bacteria, disease control 3496
 man, *Staphylococcus enterotoxigenus* detection 3892
 microorganisms, isolation, identification books 8186
 Norwalk agent, oysters man gastroenteritis food consumption 1072
Salmonella, *Clostridium perfringens*, *Campylobacter* association temperature, epidemiology, British Isles 3828.
Salmonella toxinogen, feces isolates, identification, media (isolation) 9921.
 gastroenteritis, *Campylobacter fetus* subsp. *ejuni*, man 2040.
Food processing.
Allium cepa, microbiology, bacteria 3843
 bacteria disinfection 4842.
 canning, sea food contamination 256
 canning, sterilization 268.
 coxsackievirus B5, heat inactivation, methodology 1092.
 cryogenics, effects on, bacteria 3862
 luncheon meat, bacteria, food spoilage, heat treatments, effects on 6678
 mushrooms 5610
 olives waste water, association, *Saccharomyces lipolytica* single-cell protein production 8212.
 sanitation, monitoring 805
 seafood food contamination *Staphylococcus aureus*, hygiene 3858
 solid wastes, soil microorganisms decomposition, land disposal, reviews 5981
Staphylococcus aureus viability, role thermal stability nuclease 266
 use, glucose oxidase, *Aspergillus niger* 3860.
Food quality.
 alcoholic beverages, yeasts culture effects on 1050
 beef, heat treatments, effects on bacteria reviews 8488
 fermentation, *Theobroma cacao*, methodology, effects on 3842
 milk bacteria contamination, storage 4837
 milk, detection, use, Limulus lysate test, gram-negative bacteria food contamination 8484
Food sources.
Brachionus plicatilis + anti-bacterial agents, treatment infection, *Scophthalmus*
luscus larvae 7603
 cod, juveniles, milk - colostrum, fermentation, lactic acid bacteria 7599
Drosophila, yeasts, yeasts, rot, *Opuntia stricta* 3048
Food spoilage.
 bacteria, luncheon meat, food processing, heat treatments, effects on 6678.
 coleuslaw, factors affecting, *Saccharomyces dairensis*, *Saccharomyces exiguus* 8479.
 mushrooms, γ radiation, storage, effects on cytokinins 3816.
 prevention, olives fermentation, bacteria 204.
 rates, microorganisms inactivation, incubation temperature effects on 2926.
Food technology.
 economics, oysters, pasteurization 2936
Food-borne diseases.
 food industry, quality control 7575.
Food.
 folic acid content, measuring techniques, use, *Lactobacillus casei* 7238.

Foot rot.

- pathogens, antifungal activity, peracetic acid, Gramineae 1394.
Foot-and-mouth disease.
 cattle, milk samples enumeration 4767
 vaccines, production, genetic engineering, reviews 8921.
Foot-and-mouth disease virus.
 air, sampling methodology comparison 6281
 antiserum production, vaccines, guinea-pigs 5284.
 antiviral activity, ribonuclease, pancreas, *Bacillus intermedius*, *Streptomyces*
nmosus 6077.
 antiviral activity, ribonuclease, *Streptomyces nmosus* 2492.
 foot-and-mouth disease, cattle, milk samples enumeration 4767.
 foot-and-mouth disease vaccines, production, genetic engineering 8921.
 strains, growth, quindine, temperature effects on 2469.
 vaccines, DEAE adjuvants, immune response, pigs 2600.
Footrot.
Fusarium solani, *Gossypium hirsutum* seedlings, new records, India 7695.
 Gramineae, pathogens antagonism, *Pseudocercospora helminthoides*, *Fusarium*,
Rhizoctonia cerealis 1148
Phoma medicaginis var. *pinodella*, disease resistance, *Pisum sativum*, screening
 7753.
Pseudocercospora helminthoides, factors affecting, *Triticum aestivum*,
 disease resistance 4067
Pseudocercospora helminthoides, treatment, benomyl, *Triticum aestivum* 2284.
Forage.
 quality, bacteria growth, crop residues digestion, factors affecting 4860.
Forest floor.
 branches litter, size distribution, decomposition, fungi 8647.
 Dictyostelids, species composition, ecological distribution 5849.
 humus, thiosulphate sulphurtransferase activity, soil microorganisms 7777.
 interspecific relationships, soil flora, fungi, Onitidae, reviews 5069.
 leaf litter decomposition, *Basidiomycetes* 1444.
 litter, biodegradation, *Collybia maculata*, *Collybia butyracea*, *Collybia distorta*,
Abies alba 1442.
 nutrient dynamics, detritus, leaf litter, *Pinus contorta* subsp. *latifolia*, USA,
 Wyoming 4139.
Forest products.
 fungi biodegradation, fungicides treatment 1400.
 USA, mines, *Basidiomycetes* biodegradation 7792.
Forestry.
 fungi, disease control 537.
 soil properties, seedlings, growth, mycorrhizas formation 522.
Forestry products.
 biodegradation, fungi, bacteria, control, books, conferences 10004.
Forests.
Abies alba, regeneration, association, soil microorganisms, mycorrhizas 534.
 denitrification, clear cutting 6902
 ecosystem dynamics, wood decay fungi 8646.
 ecosystems, soil, nitrogen-fixing bacteria, nitrogen fixation, reviews 9511.
 ecosystems, soil, sulfate metabolism 5102.
Eperua falcata, leaves decomposition, soil microorganisms 1439.
Eucalyptus diversicolor, calcium oxalate occurrence, nutrient dynamics,
 decomposition, microorganisms 4136.
Eucalyptus, soil extracts effects on sporulation, *Phytophthora cinnamomi*,
Phytophthora cryptogea 525
Fagus, *Magnolia*, mortality factors, pathogens, fungi 4171.
Fagus, soil horizons, aerobic bacteria levels, seasonal variations 524.
Fagus, soil nitrogen mineralization, association, nitrifying bacteria,
 ammonifying bacteria, seasonal variations 4137.
Fagus sylvatica, *Picea abies*, soils (organic), nutrient balance, soil
 microorganisms 9514.
Fagus sylvatica, soil, bacteria population density 4142.
 fertilization, thinning, effects on fruit bodies production, *Basidiomycetes* 6907.
 fertilizer applications, population density, ectomycorrhizas, *Fagus sylvatica*
 8649.
 floodplains, nutrient dynamics, litter fall decomposition, USA, Illinois 6890.
Juniperus procera, rhizosphere, inhibition nitrification 3223.
 leaf litter decomposition, measuring techniques, *eucalyptus* 1447.
 leaf litter, decomposition, nitrogen cycle 528.
 leaf litter decomposition, nutrient dynamics 2294.
 litter decomposition, role, local microflora, *Clethrionomys* 1449.
 nitrification, association succession, trees 4140.
 nitrogen cycle 2308.
 nitrogen cycle, fungi, nitrogen mineralization 514.
 nitrogen cycle, leaf litter decomposition 2306.
 nitrogen mineralization, disturbance, nutrient dynamics 6901.
 nitrogen mineralization, soil acidification, mathematical models 4138.
 nutrient dynamics, nitrogen mineralization, leaf litter production 6895.
Phellinus weirii, *Streptomyces antagonism* 2288.
Picea sitchensis, *Tsuga heterophylla*, wood decay, C/N ratios 527.
Picea, soil, soil microorganisms, sulfate conversion 6903.
Pinus, fungi, biomass, spatial distribution, seasonal variations 515.
Pinus leucodermis, soil, wood, *Basidiomycetes*, new records, Yugoslavia 7778.
Pinus pseudotsuga, *Abies*, mortality, root rot 5075.
Pinus resinosa, organic matter decomposition, nitrogen cycle, ecosystem dynamics
 526
Populus tremuloides, canker, *Hypoxylon mammatum* 1464.
Quercus robur, *Quercus rubra*, fungi, plant diseases, mortality, pollution
 effects, air pollution 6926.
 recreation, environmental impact, soil properties 6892.
 respiration, soil properties, diurnal variations 1493.
 soil, acetylene reduction, nitrogen fixation, measuring techniques 7835.
 soil, analysis, sodium, microorganisms enzymes, land reclamation 7822.
 soil, *Cenococcum geophilum* sclerotia, abundance 6894.
 soil, drying, storage conditions, soil microorganisms, species diversity 5856.
 soil effects on *Phytophthora*, survivability germination infectivity, mycelia,
 chlamydospores 1483.
 soil, fungi, abundance, species composition 3160.
 soil microorganisms, air pollution, sulfur dioxide effects on 5854.
 soil microorganisms, biological activity, biodegradation, wood, Canada 6893.
 soil microorganisms, canopies effects on nitrogen cycle 512.
 soil microorganisms, nutrient cycles, succession, montane environments 2297.
 soil microorganisms, population levels, human impact trampling 4133.
 soil microorganisms, population studies, spatial distribution, *Tricholomopsis*
platyphylla 1445
 soil nitrogen mineralization 523.

Forests, (continued)

- soil properties, phosphorus mineralization, measuring techniques 521.
soil sulfonamide sulfur mineralization, soil microorganisms, USA, North Carolina 6904
soils (acid), denitrification measurements 7844.
soils (acid), nitrification, Nitrobacter, Coniferales 1446.
steppes, trophic relations, community structure, nutrient dynamics 1448.
Tanzania, mycorrhizal symbiosis, trees, shrubs 2236.
terrestrial ecosystems, nitrogen cycle, nitrification association 513.
trees, cylindrocladium scoparium diseases, Malaysia 2316.
Tricholomopsis platyphyla spatial distribution 1437.
tropical environment, leaf litter decomposition, Guyana 8447.
tropical environment, leaf litter decomposition, population levels, soil microorganisms 5855.
tropical environment, leaf litter, fungi, species composition, population levels 1443.
- L form,**
Clostridium perfringens, bacteriocins, antibacterial activity 759.
Staphylococcus aureus, cell fusion, recombinants, antibiotic resistance 3286.
- Formaldehyde,**
antibacterial activity, Bacillus cereus spores, dimethyl sulfoxide, EDTA, effects on 8772.
cattle, effects on proteins metabolism, rumen microorganisms 4857.
dietary intake, Platynota daealsis larvae, association, Bacillus thuringiensis subsp. kurstaki toxicity 7498.
infection, hospitals 9821.
gases, sterilization methodology 8801.
- Formaldehyde dehydrogenase (glutathione),**
purification, characterization, Pseudomonas putida, Debaryomyces vanriji 6516.
- Formalin,**
antifungal activity, fungi cell culture 8793.
- Formamide,**
effects on, Escherichia coli, alkaline phosphatase subunit association, role metals 2770.
- Formate,**
conversion, hydrogen gas production, Enterobacteriaceae 4708.
radicals, biosynthesis, Methanobacterium formicicum 3734.
- Formate acetyltransferase,**
association, Streptococcus mutans fermentation 1.
- Formate dehydrogenase,**
active sites lysine residues, chemical modification, bacteria 7390
immobilized enzymes, yeasts 50
role, generation NADH, methane monooxygenase epoxidation alkenes, Methylosinus 6474
use, bacteria, NAD regeneration systems 4686
- Formate dehydrogenase (cytochrome),**
purification, characterization, Escherichia coli 4651.
- Formate dehydrogenase (NADP⁺),**
molybdenum, tungsten containing multiple forms, purification, activity, C.D., E.S.R., absorption spectroscopy, Clostridium thermoacetum 8280.
- Formic acid,**
antifungal activity, wheat post-harvest decay 441.
formyltetrahydrofolate synthetase interaction, N.M.R., Clostridium cylindrosporum 2803.
metabolism, energetics, Pichia pastoris 7546.
production, Bacillus brevis, gramicidin biosynthesis 774.
- 2'-N-Formimidoylthiamycin A,**
biosynthesis, Streptomyces jenamariensis 1655.
- N-Formimidoyl thiamycin,**
+amikacin, antibacterial activity, gram-negative bacilli, Staphylococcus aureus 1660
anaerobic bacteria susceptibility 5194.
antagonism cephalosporins, β -lactamase induction, Aeromonas hydrophila, Serratia marcescens 7059.
antibacterial activity 8808
antibacterial activity, Acinetobacter calcoaceticus subsp. anitratus, Acinetobacter calcoaceticus subsp. lawii 7979.
antibacterial activity, Enterobacteriaceae, Streptococcus group D, Pseudomonas aeruginosa 3430.
antibacterial activity, gram-negative bacilli 7983.
antibacterial activity, Mycobacterium fortuitum 1615.
antibacterial activity, Neisseria meningitidis, Neisseria gonorrhoeae 776.
antibacterial activity, Pseudomonas aeruginosa, Enterobacteriaceae 7075.
antibacterial activity, Staphylococcus aureus 773.
antibacterial activity, Streptococcus pneumoniae, Haemophilus influenzae 2061.
antibiotic resistance, Staphylococcus 7041.
antibiotic synergism, amikacin, cefotaxim, fosfomicin, antibacterial activity, Pseudomonas aeruginosa, Klebsiella pneumoniae 3394.
bacteria antibiotic sensitivity testing 7984.
comparison, cefotaxim, tobramycin, antibacterial activity, bacteria clinical isolates 7078.
+ gentamicin: amikacin, antibiotic synergism, antibacterial activity, Streptococcus faecalis 3417.
+ gentamicin, + tobramycin, antibiotic synergism, antibacterial activity, Streptococcus faecalis, Streptococcus faecium 1623
stability, β -lactamase, antibacterial activity, β -lactam bacteria, comparison cephalosporins 729
suicide inhibitors, β -lactamase, gram-negative bacteria 2810.
- 2'-N-Formimidoylthiamycin B,**
biosynthesis, Streptomyces jenamariensis 1655
- Formycin B,**
injection, disease control, apple mosaic virus, Malus pumila 9500.
- Formyl-isoline,**
Eichloro typhina, accumulation, Festuca arundinacea 7499.
- N-Formyl-13-dihydrocarinomycin,**
biosynthesis, Actinomycetes, isolation, structure 5542.
- 2'-N-Formylisoleucin,**
Dactyloporangium thailandense, biosynthesis, isolation, characterization 4415.
- Formyltetrahydrofolate synthetase,**
interaction, formic acid, methylammonium, N.M.R., Clostridium cylindrosporum 2803.
- Forphenicolol,**
synthesis 3737.
- Fortuitin,**
conformation, N.M.R., Mycobacterium fortuitum 6391
- Foscarnet,**
antiviral activity 6065.
- Fosfomicin,**
- amoxicillin, sensitivity, Staphylococcus aureus, Escherichia coli 8040.
antibacterial activity 7184
antibacterial activity, inactivation UDP-N-acetyl glucosamine 1-carboxy vinyl transferase, Escherichia coli 8043.
antibacterial activity, Salmonella infection treatment, children 6189.
antibiotic sensitivity testing methodology comparison 6090.
antibiotic synergism, sagamycin, antibacterial activity 8023.
derivatives, antibacterial activity 8890.
effects on Escherichia coli ultrastructure 8892.
effects on Staphylococcus aureus cell walls phospholipids, content 3380.
+N-formimidoyl thiamycin, antibiotic synergism, Pseudomonas aeruginosa, Klebsiella pneumoniae 3394.
+mideacin, antibiotic synergism, antibacterial activity, Pseudomonas aeruginosa 1669
treatment effects on, Staphylococcus aureus, viability, ultrastructure 7060.
- Fouling,**
assays methodology, bacteria 8128.
- Fouling organisms,**
antibacterial activity, antifouling substances, metals, sea water 151.
aquatic microorganisms, corrosion steel surfaces, sea water 1055.
bacteria, films, cooling water, industrial water systems 6257.
bacteria, heat transfer equipment, metals 5444.
biofouling, fungi, bacteria, control, oil, books, conferences 10004.
tubular flow systems, films, quantitation 5316.
wastewater treatment, membrane filtration, bacteria, films characterization 3465.
- Fowl plague virus,**
mutants, nbavirin drug resistance 630.
oligosaccharides biosynthesis, streptoviridin antiviral activity, cell culture 8066.
- Frageria,**
disease resistance, anthracnose, Colletotrichum fragariae, screening 1258.
fruit rot, Botrytis cinerea, Phytophthora cactorum 3092.
leafspot, anthracnose, Colletotrichum gloeosporoides 9425.
menstrum tip culture, viruses elimination 2243.
powdery mildew, Sphaerotheca maculans 5007.
yield, rot, Phytophthora cactorum, effects on 5755.
- Frageria ananassa,**
disease control, viruses reservoirs relationship, Nematoda 1,3-dichloropropene pest control 9479.
- Frageria chiloensis var. ananassa,**
sur composition, effects on, grey mold, Botrytis cinerea 5028.
- Frageria vesca,**
Colletotrichum fragariae infection, histopathology 422.
Phytophthora fragariae infection, epidemiology 3984
red core disease control, agricultural practices association, dazomet, fenamonsulf 1415.
- Frageria virginiana,**
disease reservoirs, tomato ringspot virus, prunus 1209.
- Frangrances,**
microorganisms, characterization, production 4718.
- France,**
bacteria antibiotic resistance, aminoglycoside antibiotics, epidemiology, plasmids association 6006.
- Francisella tularensis,**
antibiotic resistance spectinomycin, antibacterial activity 8874
penicillin antibiotic resistance mechanisms 8745.
tularemia, diagnosis, Dermacentor marginatus tissues fixation, disinfection 1774.
- Frankfurter,**
gases composition, storage, Lactobacillus, spoilage 5639.
spoilage, bacteria, water activity 6667.
- Frankia,**
Alnus glutinosa, actinorrhizas, nodulation, growth 5967.
colonization, Alpova diplophloeus, Hartig net, Alnus crispa, Alnus rugosa 7776.
+ Glomus mosseae, effects on nitrogen fixation, Casuarina equisetifolia 3215.
isolates characteristics, Alnus 2227.
plasmids, nodules, Alnus glutinosa 560.
strains, nitrogenase activity, nitrogen fixation, plants nodules 4239.
- Frankia alni,**
actinorrhizas, nitrogen fixation, Alnus rubra 5958.
- Fraxinus excelsior,**
Pseudomonas syringae subsp. savastanoi infection, pathology 4172.
- Fraxinus pennsylvanica,**
growth, association, vesicular-arbuscular mycorrhizal symbiosis, morphology 420.
seedlings, vesicular-arbuscular mycorrhizas, phosphate uptake 9503.
- Freeze drying,**
Bacillus, cell culture biochemical properties 8368.
BCG, stability 6239
- storage effects on Bacillus brevis spores viability, gramicidin S biosynthesis 9783.
viability, lactic acid bacteria, starter cultures 9878.
viability, Lactobacillus plantarum, Micrococcus varians 8116.
adonitol, protection, lactic acid bacteria 2686.
agar, media (culture), bacteria 5386.
bacteria culture, association, contamination analysis methodology 2684.
C-type virus infectivity preservation 1745.
potato virus Y, potato virus M, potato virus A, preservation, infectivity 2653.
storage, Mycobacterium 1800.
- Freeze-fracture,**
plasma membranes, Candida albicans, antifungal activity, amphotericin B 8009.
Saccharomyces cerevisiae plasma membranes, association, resistance evaporative 4514.
- Freeze-thawing,**
effects on bacteria levels, food contamination, curing, ham 182.
meat, Staphylococcus aureus survival, pH effects on 4816.
skim-milk, viability, bacteria, Saccharomyces cerevisiae 220.
Trichomonas, effects on Cephalosporium gramineum infection 376.
tundra peat, effects on soil microorganisms 5800.
- Freezing,**
asparaginase, stability, Candida guilliermondii 7333.
+ drying, soil, effects on soil microorganisms 579.
effects on infectivity, potato leaf roll virus, antigenic characteristics, Solanum tuberosum 9422.

Fruit rot. (continued)

143

Fungal flora, (continued)

- seasonal variations, community composition, crop fields, *Brassica campestris* 9546.
 - seed composition, *Prunus amygdalis*, water activity effects on 5803.
 - seed-borne diseases, inhibition seed germination, *Cedrus deodara* 9528.
 - seeds, Compositae 7726.
 - seeds, *Elettaria cardamomum* 7725.
 - soil microorganisms, community composition, deserts, Kuwait 8673.
 - soil microorganisms surveys, Syria 7814.
 - surveys, rhizosphere, *Saccharum officinarum* 7813.
 - Thalassia testudinum* leaves, sterilization methodology 3623.
- Fungi**
- abundance, species composition, forests soil 3160.
 - afatoxins, high-performance liquid chromatography, milk products 3875.
 - airborne microorganisms, nosocomial environments 5340.
 - airborne microorganisms, wind velocity, effects on, enumeration 1813.
 - aluminum phosphate solubilization, acid production 5891.
 - amino acids, aminidation, antifungal activity 2478.
 - amphotericin B, 5-fluorocytosine, ketoconazole, miconazole, interaction, antifungal activity 1567.
 - analysis, sewage, Mexico 8953.
 - antibiotics production, chirality 7127.
 - antifungal activity, *Azotobacter* antibiotics 5933.
 - antifungal activity, biological control, *Brevibacterium linens* 2837.
 - antifungal activity, monilaum 689.
 - antifungal activity, neopeptide, inhibition, cell walls biosynthesis 4396.
 - antifungal activity, *Streptomyces fimbriatus* 1,3-dihydroxy-9-decen-5-ol on 9201.
 - antifungal activity, undecylenic acid emulsions 7932.
 - antifungal agents, disease control, *Rubus idaeus* 487.
 - antifungal agents fumigants, disease control, post-harvest decay, *Pseudotsuga menziesii* wood 1468.
 - antifungal agents resistance, New Zealand 7880.
 - antimicrobial activity, *Basidiomycetes*, antibiotics 2496.
 - antimicrobial activity, preservatives, acetic acid, sodium chloride, essential oils 706.
 - antimicrobial activity, roots extracts, *Agrimonia pilosa* 8800.
 - antimicrobial activity, synergism, ethanol+sodium chloride+acetic acid+essential oils 715.
 - antimicrobial activity, 2H-1,3,5-thiadiazine-2,4(3H)-dione derivatives 1585.
 - antimicrobial agents biological properties, synthesis 8773.
 - antitoxins, screening, identification, characterization, methodology 898.
 - Apios tuberosa* inoculation, apicopain response 3143.
 - aromatic compounds oxidation, 1-naphthol levels 4521.
 - association cryptogams, North America, deserts soil, characterization 5887.
 - association, insects, seeds, deterioration 2975.
 - association, physiological disorders, tissues, *Tritolium vesiculosum* 8544.
 - biodegradation, carbohydrates, straw 8442.
 - biodegradation, cellulose 5594.
 - biodegradation, cellulose acetate reverse osmosis membranes 2883.
 - biodegradation, colonization, leaf litter 3771.
 - biodegradation, carbohydrates, residues 2729.
 - biodegradation, feeds preservation, 8-quinolinol treatment 5630.
 - biodegradation, forest products, fungicides treatment 1400.
 - biodegradation, hydroquinone 8427.
 - biodegradation, *Pinus radiata*, stands, leaf litter 3796.
 - biodegradation, *Populus*, lignin 6852.
 - biodegradation, *Populus tremuloides*, leaf litter 8045.
 - biodegradation resistance, hetero-organic contents 2384.
 - biodegradation, wheat storage conditions 2915.
 - biodegradation, wood, chromated copper arsenate treatment 3766.
 - biodegradation, wood resistance 5591.
 - biodegradation, bacteria, fouling organisms, control, oil, forestry products, effluents, Gramineae, books, conferences 10004.
 - biological control, Insecta 4722.
 - biological control, Insecta 7471.
 - biological control, Insecta pathogenicity plants, books 9093.
 - biological control, pathogenicity, animals 4711.
 - biological control, *Venturia inaequalis* scab, *Malus pumila* 5825.
 - biomass, spatial distribution, seasonal variations, *Pinus*, forests 515.
 - biosynthesis, 1,3- β -glucanase, 1,4- β -glucanase 1929.
 - brown rot, *Pinus palustris* decay, fluorescence microscopy detection 4047.
 - brown rust, *Hordeum*, carbon translocation 6769.
 - cadmium bioaccumulation, pollution effects 794.
 - carbohydrates digestibility, feeding trials, animals 3853.
 - carbon biodegradation, soils (volcanic) 159.
 - carrots, washing effects on 5613.
 - cell culture, formalin antifungal activity 6793.
 - cell size measuring techniques, Coulter nano-sizer 2646.
 - cellulase activity 1926.
 - cellulase decomposition, ethanol fermentation 3753.
 - cellulolytic enzymes, glucose production, cotton wastes 6653.
 - cellulolytic microorganisms, exo-cellulohydrolase, relationship, β -D-glucosidase levels 2814.
 - cellulose biodegradation, association, carbohydrates composition 3767.
 - chlone effects on conidia 2475.
 - chlorothalimil residues, *Solanum tuberosum* foliage, mathematical models 5819.
 - Chrysoidodacpus lutescens* leafspot, infection 1269.
 - clubroot, *Brassica oleracea*, disease control, transplantation 4073.
 - coffee, fermentation 4432.
 - colonization, *Sorghum bicolor* stalks, roots 5715.
 - contamination, animals feeds, conferences 5455.
 - contamination, *Cannabis sativa* cigarettes 8172.
 - contamination, control, preservatives, antibacterial activity 4320.
 - contamination, feeds, mycotoxins 3868.
 - contamination, food industry, sugars 184.
 - contamination, kiwifruit post-harvest decay, USA, California 5031.
 - contamination, semen cryopreservation method, antimicrobial activity, nipaigin 1591.
 - contamination, vaccines, antibiotic resistance, drug resistance, characterization 2396.
 - counting methods, beaches 9071.
 - counting methods, media (isolation), milk products 4530.
 - cross-resistance, iodine, association fenarimol resistance 7022.
 - crown rot, *Musa sapientum*, pathogenicity 395.
 - cryopreservation, nitrogen (liquid), methodology 6345.
 - cultures, fermentation, solid-phase methods, sawdust, straw 8444.

Fungi, (continued)

- cutinase 8241.
- cytogenesis assays, *Pseudomonas* contamination, hydrogen cyanide 3556.
- dating methods, Shroud of Turin 2645.
- Daucus carota* roots phytoalexins antimicrobial activity 5057.
- decomposition, carbon dioxide gas production, gas chromatography, wood, *Fagus sylvatica* 9530.
- decomposition, litter size distribution, branches, forest floor 8647.
- degradation, malathion, stored products, grain, *Aspergillus glaucus* 7557.
- detection, biodegradation, industries, conferences 4575.
- detection, indirect fluorescent antibody test, lung secretions, man 9079.
- disease control, canned food, meat 3807.
- disease control, factors affecting, barley storage 7724.
- disease control, forestry 537.
- disease resistance, plant breeding, Gramineae 2241.
- diseases, bananas, post-harvest decay 1328.
- diseases, *Gossypium* seedlings, disease control 2225.
- diseases, plants, rare species, USSR 7646.
- diseases, *Vitis vinifera*, characterization 5026.
- distribution, association ornamental plants pollen, airborne particulates 7705.
- drug sensitivity testing, aculeacin A 4308.
- dust, pigs housing 7638.
- effects on roots, growth, *Lupinus albus* 582.
- effects on seeds germination, *Phasolus mungo* 3924.
- effects on seeds germination, *Phasolus mungo* 3924.
- effects on, *Tovomita brasiliensis*, coumarins 7789.
- endophytes, *Lolium perenne*, association *Crambus* resistance 4954.
- enumeration, membrane filtration 3512.
- etiology, gummosis, *Amygdalus communis* 3030.
- feeds contamination 4861.
- feeds contamination, mycotoxins, cattle sterility 4890.
- feeds contamination, quality control 4862.
- fermentation, reflectance I.R. radiation analysis 9227.
- fluorescence, staining, ethidium bromide, methodology 2720.
- 5-fluorocytosine susceptibility, association *allopurinol* 8790.
- food contamination, beans sprouting 3831.
- food contamination, chitin levels, indicators 3819.
- food contamination, cold storage 242.
- food contamination, conferences 5453.
- food contamination, counting methods, fluorescence, membrane filtration 176.
- food contamination, fruit juices, surveys 225.
- food contamination, Gramineae, post-harvest decay 2236.
- fruit rot symptom, *Prunus persica* 3735.
- fungicides resistance, measuring techniques 7885.
- fungicides resistance, plant diseases, conferences 2730.
- β -D-galactosidase, lactose hydrolysis, skim milk yogurt production 7569.
- gas production, yogurt, identification 4840.
- α -D-glucosidase hydrolysis, carbohydrates 7431.
- gold, biogeochemistry 7013.
- growth, contamination, ham, smoking, curing 180.
- growth, contamination, tobacco 438.
- growth monitoring, penicillin fermentation, computer applications, media (culture) 9755.
- growth monitoring, penicillin fermentation, media (culture), computer applications 9754.
- growth, monitoring, propionic acid, antifungal activity, preservation, feeds 1086.
- heavy metals leaching, screening methodology 3256.
- Helianthus annuus* sesquiterpene lactones antimicrobial activity 7953.
- Holothuridea triterpene glycosides antimicrobial activity 2494.
- host-pathogen interactions, disease resistance, genetic factors, plants 468.
- humus complex phosphate, nutrient availability, fertilization, agricultural land 3625.
- hyphae, growth chambers 9988.
- identification, diagnosis, methodology, automated methods, books 5449.
- imidazoles, derivatives, antifungal activity 2480.
- immobilized cells, transformation, steroids, reviews 3706.
- immobilized enzymes, disaccharides analyzers 7342.
- incidence, drinking water systems 1722.
- incidence, sandbox, children 1726.
- leaves, *Avena sativa*, spectrophotometry, localization, avenalumin 3912.
- infection, *Agaricus*, prochloraz, disease control 4118.
- infection, association *Phyllaphis* fagi outbreaks, *Fagus* 3166.
- infection, *Basidiomycetes*, cultivation 2208.
- infection, blueberries, post-harvest decay, disease control, carbon dioxide storage 3106.
- infection, *Citrus*, disease control, fungicides 4112.
- infection, *Clavicea* officinalis, ascorbic acid content 3964.
- infection, etiology, dieback, *Abies* 7874.
- infection, *Glycine* max 3251.
- infection, *Gossypium hirsutum* seeds, protection 5068.
- infection, Gramineae, *Gaeumannomyces graminis* suppression, soil, effects on 32.
- infection, *Hordeum*, plant diseases, fungicides treatment 497.
- infection, *Lolium perenne*, incidence, disease control 377.
- infection, *Lupinus*, relationship, grazing animals lupinus 5005.
- infection, *Lycopersicon esculentum*, relationship, electrophoresis, acids solubility proteins 2983.
- infection, *Maleleuca quinquevnia*, disease resistance 5086.
- infection, *Mangifera indica*, disease transmission, *Amrfitodus atkinsoni*, *Idioscopus chrysalis* 3022.
- infection, *Medicago sativa*, disease resistance 7750.
- infection, *Petroleumum hortense* cell culture, phytoalexins induction 5765.
- infection, *Petroleumum hortense* cell culture, phytoalexins biosynthesis enzymatic activity 5767.
- infection, phytoalexins response, neurotoxins, *Lolium perenne*, role staggers 3955.
- infection, *Pinus sylvestris* leaves, relationship, age 4177.
- infection, plants, 2-chlorethylphosphonic acid effects on pathogenicity 319.
- infection, *Pseudotsuga menziesii* roots, incidence 4162.
- infection, roots, *Convolvulaceae*, weeds, susceptibility 9394.
- infection, *Sorghum bicolor*, Zea mays, *Triticum aestivum*, plant protection, coatings, waxes, plastics 4071.
- infection, stimulation, disease resistance, plants 3120.
- infection, trees, wind barriers, distribution 4175.
- infection, *Triticum aestivum*, fallow land effects on root rot 379.
- infection, *Triticum aestivum* seeds, relationship germination 8600.

Fungi, (continued)

- infection, vegetables, cultivation, disease control 2209.
infection, vegetables, plants, disease control 2267.
infection, *Vigna radiata*, biodegradation, seed-borne diseases 3915
infection, wood, burning effects of public health, airborne microorganisms, man 4454
infection, *Zea mays*, propionic acid effects on growth 6746.
interspecific relationships, dialysis, membranes, methodology 2715.
isolation, methodology 902.
laccase, vinole conversion 7447.
L-lactam antibiotics biosynthesis, protoplasts fusion, recombination 8806.
Larix defoliation, association *Aedes* grazing 540
leaf litter decomposition, saprophytes, *Abies alba* 6906.
leaf litter decomposition, tropical environment, forests, Guyana 8447.
leaf litter, soil, nutrient cycles, ecosystem analysis, reviews 5889.
leafspot, *Cymbopogon martini* 3985.
leafspot, *Eucalyptus*, New Zealand 7706.
lignin biodegradation, *Pinus*, straw 171.
low molecular weight metabolites, taxonomic significance, evolution 5461.
Lupinus diseases, association, crop rotation 4985.
meconop biodegradation 2878.
media (culture), wort 2714.
media (selective), quality control 7212.
medical dressings contamination 8073.
melanins, degradation, soil microorganisms, soils (sodic) 2335.
microflora, *Hordeum*, fungicides treatment effects on 7766.
microorganisms, microbiology, books 8184.
milk biodegradation, soil 163.
mixed culture, lignocellulose biodegradation 3772.
mixture culture, protein biosynthesis, whiskey distillates wastes 15.
mycelia, fermenters, sampling equipment 5080.
mycelium, leaf litter decomposition, *Colembola* grazing effects on, nitrogen, cations leaching 3212.
mycelia, p-aminobenzoic acid concentration, relationship levorin biosynthesis 7171.
mycelia, penetration, pores, *Glycine max*, seeds 321.
mycorrhizas, host specificity, *Eucalyptus*, *Pinus radiata*, Pinaceae 5901.
mycorrhizal biosynthesis, environmental factors effects on 284.
mycotoxins, biosynthesis, environmental factors effects on 284.
mycotoxins, biosynthesis, screening methodology 3873.
mycotoxins, detection, bioassays, food 2939.
mycotoxins, food contamination, animals feeds, fungicides use control 3865.
mycotoxins, food contamination, incidence, British Isles 3878.
mycotoxins production, association, corn spoilage, storage 2069.
mythodius, *Trifolium repens* roots invasion 5892.
nitrogen mineralization, forests nitrogen cycle 514.
nitrous oxide biosynthesis 1968.
nutrient cycles, biomass, stands, *Pseudotsuga menziesii*, USA, Oregon 6905.
nutritive value, digestibility, man 5815.
organic matter decomposition, antibiotics effects on 5922.
ornamental plants disease control fungicides use 5056.
orthodosis, *Pinus contorta* var. *latifolia*, association, *Dendroctonus ponderosae* transmission 3167.
pathogens, antifungal activity, bifonazole, clotrimazole 7938.
pathogens, biological control, Clitellidae 1017.
pathogens, biological control, *Culicoides* 1013.
pathogens, biological control, pest control, Insecta 994.
pathogens, disease resistance, association, *Hordeum spontaneum* fertility 6759.
pathogens, foliage, humidity chambers 4523.
pathogens, identification, immunoassays, reviews 8165.
pathogens, interaction vesicular-arbuscular mycorrhizas, plant diseases 317.
pathogens, mortality factors, forests, *Fagus*, *Magnolia* 4171.
pathogens, ornamental plants, fungicides resistance, greenhouses 4099.
pathogens, pest control, Insecta 995.
pathogens, plants, solar radiation effects on viability 4919.
petulin, carbohydrates effects on antibacterial activity, *Streptococcus bovis* 273.
petulin, incidence, *Beta vulgaris* roots feeds 1089.
pears post-harvest decay, antifungal activity, surfactants + chlorine 1323.
peat, biodegradation, anaerobic conditions, C/N ratios 9264.
penicillin fermentation, biomass measuring techniques, probes 9085.
peroxidase activity, oxidation humic acids, soils (organic) 5925.
pesticides resistance, fungicides exposure 9639.
phosphate solubilization, carbon sources, soil 9533.
phytoalexins, inhibition seeds germination, *Guzotia abyssinica* 2082.
plant diseases, conferences 7280.
plant diseases, epidemics, mathematical models 3906.
plant diseases, *Glycine max*, Gramineae, seed treatments, fungicides, reviews 4132.
plant diseases, Gramineae, disease control 5829.
plant diseases, Hevea brasiliensis, disease control 5067.
plant diseases, mortality, pollution effects, air pollution, forests 6926.
plant diseases, new records, New Zealand 322.
plant diseases, ornamental plants, trees, fungicides 9490.
plant diseases, roots growth, epidemiology, reviews 3903.
plant diseases, *Triticum*, *Erysiphe graminis*, *Puccinia hordei*, *Septoria*, disease control, fungicides 5830.
plants diseases, new records, New Zealand 3699.
plants pathogens, new records, New Zealand 326.
population dynamics, association, heavy metals gradients, soil, Sweden 6896.
populations, South Africa Rep. plains 4217.
post-harvest decay, papaise, storage time effects on 5030.
post-harvest decay, cantaloupes, control, use, benomyl + guazinate 6835.
post-harvest decay, corn fungicides prevention, seeds viability 5029.
post-harvest decay, corn sulfur dioxide effects on 6836.
post-harvest decay disease control, fruits 1327.
post-harvest decay, ethylene, effects on, growth 8794.
post-harvest decay, etiology, *Manihot esculenta* 3102.
post-harvest decay, guavas, disease control, benomyl, guazinate 6832.
post-harvest decay, kiwifruit 3104.
post-harvest decay, prunes 5801.
powdery mildew, *Vitis vinifera*, *Cucumis sativus*, *Triticum*, disease resistance, cultural conditions 2250.
production DNA damage metabolites, detection, use *Bacillus subtilis* rec gene assays 7246.
products biodegradation, tropical environment 2004.

Fungi, (continued)

- proteinase activity, inhibitors, *Bombyx mori* 2751.
prunes spoilage 4777.
respiration, fermentation heat, carbon sources 145.
Rhizobium japonicum antagonists 576.
rhizosphere microorganisms, *Nicotiana rustica* age effects on 7795.
root rot, infection, *Trifolium*, effects on yield 2104.
root rot, *Phaseolus vulgaris*, incidence, USA, Wisconsin, bioassays 3923.
root rot, *Triticum aestivum* yield, factors affecting 1179.
rust, Leguminosae, bioassays, detection, chitin 8737.
rust susceptibility, relationship taxonomy, Rosaceae 2201.
+Ruta graveolens callus mixed culture, acridone epoxides biosynthesis 7266.
scanning electron microscopy, books 903.
secondary metabolism, metabolites, books 3637.
seed-borne diseases, pathogenesis 2973.
seed-borne diseases, quality control assays 2968.
seeds microflora, *Glycine max*, gibberellins: *Azotobacter foliar* applications effects on 5671.
self fluorescence, use, detection, tissues 8156.
siderophores detection, electrophoresis methodology 8090.
silage fermentation 5629.
silage, mycotoxins production 4892.
single-cell protein, nutritive value, production, economics, technology 9107.
single-cell protein production 7602.
single-cell protein production, hydrocarbons 4769.
slide preparation media 2723.
soil, benodanil, media (selective) 1404.
soil, *Beta vulgaris*, crop rotation, insecticides, herbicides, effects on 618.
soil fauna association *Zea mays* 6941.
soil flora, forest floor, interspecific relationships, Onibatidae, reviews 5069.
soil, herbicides effects on 8707.
soil isolates, antifungal activity, metiram, benodanil 2286.
soil microorganisms association *Glycine max*, propachlor effects on 7862.
soil microorganisms, carpat effects on 3248.
soil microorganisms, growth, spore germination, ammonia, volatiles, effects on 2349.
soil microorganisms, isolation, use, media (culture) + validamycin 2709.
soil microorganisms, low temperature scanning electron microscopy 578.
soil microorganisms, soil amendment, carbendazim, fluorometuron, caracron, effects on 2379.
soil microorganisms, species diversity, biogeochemistry, USSR 2347.
soil microorganisms, vertical distribution, soil profiles 2350.
soil, population dynamics, soil analysis, methodology 4224.
soil-borne diseases, soil solar radiation effects on 7754.
Solanum tuberosum blight, detection, aerial photography, I.R. radiation 1252.
species composition, population levels, leaf litter, forests, tropical environment 1443.
species composition, soil microorganisms, population levels, slash and burn 9622.
spoilage, hay, prevention, antifungal agents 247.
spoilage, meat products, vacuum packaging 4880.
spoilage, milk products, polyethylene packaging, oxygen permeability 4884.
spoilage, mycotoxins, contamination, corn 5643.
spoilage, preservation, isobutyric acid, propionic acid, corn 5626.
spoilage, stored products 436.
spore germination, iprodione, thiophanate methyl, effects on 7765.
spores germination, rhizosphere, *Cajanus cajan*, *Lathyrus sativus* 558.
stagers, Lolium, propiconazole, antifungal activity 2481.
storage, nitrogen (liquid), culture collection 4540.
storage, plant extracts antifungal activity 7934.
strobomycin cytolytic activity 6059.
styryl cyanine dyes, bactericidal activity 9703.
submergence, water pollution effects on 8977.
substrates utilization, reviews 6655.
take-all, *Triticum aestivum*, soil microorganisms, amoeba, phagocytosis 4223.
therophilic microorganisms, α-amylase biosynthesis 1913.
toxins production, detection methodology 4542.
transformation, use, organic compounds production, reviews 5441.
treatment, pulp, effects on paper 896.
trifluralin biodegradation 8446.
use, antibiotics production, reviews 5238.
use, drug sensitivity testing, antimicrobial agents efficacy 9702.
use, production, food, fuels, chemicals, reviews 5443.
use, purification, *Beta vulgaris* dyes 9086.
viruses, role, plant diseases, reviews 1119.
wastewater treatment, industrial effluents, pulp mills 6245.
what, factors affecting post-harvest decay 4054.
white rot resistance, *Brassica inopla*, phenolic sugars concentration 5769.
wood decay, ecosystem dynamics, forests 8646.
wood decomposition, spatial distribution, population levels, stands, *Fagus grandifolia*, *Acer saccharum* 6891.
wood, effects on cellulose biodegradation, cellulolytic microorganisms 2005.
wound infection, *Picea abies*, disease resistance 4176.
Xenorhabdus antibiotics activity 3372.
- Fungicidromin**
Streptomyces, comparison, lagosin, cogomycin, physicochemical properties, biological properties 2591.
- Fungicides**
antibacterial activity 8633.
antifungal activity, in vitro, *Phytophthora palmivora* 5824.
application methodology, association, *Phytophthora citrinarum* eczema, livestock 4529.
applications, late blight, *Phytophthora infestans*, *Solanum tuberosum* 4106.
applications, methodology, comparison, disease control, brown rot, *Phytophthora citrophthora*, citrus 8638.
± *Bacillus subtilis* biological control, white rot, *Allium cepa*, seed treatments 4103.
biodegradation, *Nocardia* 4763.
Brassica campestris, effects on leaf surface fungal flora 3146.
control, post-harvest decay, *Botryodiplodia theobromae* rot, bananas 5804.
Cucumis melo post-harvest decay, effects on 7723.
dicarboximide, *Botrytis cinerea* resistance, New Zealand 7880.
disease control, black spot, *Disporopsis kaki* 8628.
disease control, blight, *Sclerotinia rolfsii*, *Poa* 1402.
disease control, downy mildew, powdery mildew 1433.
disease control, *Erysiphe polygoni*, powdery mildew, *coriandrum sativum* 493.
disease control, fruit rot, *Ficus carica* 1396.

Fungicides, (continued)

- disease control, fungi infection, Citrus 4112.
disease control, fungi, post-harvest decay, cantaloupes 1399.
disease control, late blight, *Solanum tuberosum* 1388.
disease control, leafspot, *Arachis hypogaea* 9485.
disease control, leafspot, *Pestalotia palmarum*, *Helminthosporium*, *Cocos nucifera* 1391.
disease control, *Monilia fructicola*, brown rot, orchards, *Prunus persica* 1405.
disease control, *Phytophthora*, *Pestalotia*, fruit rot, *Malus pumila* 1392.
disease control, *Phoma tracheipolia*, mal secco disease, citrus 4101.
disease control, *Phragmidium mucronatum* rust, *Rosa laxa* 4115.
disease control, *Phytophthora nicotianae* var. *parasitica*, root rot, seedlings, citrus lemon 449.
disease control, plant diseases 7758.
disease control, plant diseases 7759.
disease control, plant diseases, foliar applications 8636.
disease control, powdery mildew, *Hordeum vulgare* 9489.
disease control, powdery mildew, *Podosphaera leucotricha*, *Malus pumila* 2280.
disease control, powdery mildew, *Podosphaera leucotricha*, *Malus pumila* 2281.
disease control, *Pseudomonas syringae* pv. *tomato*, speck, *Lycopersicon esculentum* 5822.
disease control, *Pseudoperonospora humuli*, downy mildew, *Humulus lupulus* 1403.
disease control, *Pyrenopeziza brassicae*, leafspot, *Brassica oleracea* 2276.
disease control, *Pycularia oryzae*, blast, *Oryza sativa* 8630.
disease control, *Ravenelia lagerheimiana* infection, *Enterolobium cyclocarpum* 8656.
disease control, *Rhynchosporium secalis*, leaf blotch, *Hordeum vulgare* 5809.
disease control, root rot, *Lycopersicon esculentum*, *Solanum melongena* 6872.
disease control, *Rosa canker* 1410.
disease control, *Sclerotinia graminicola* downy mildew, *Pennisetum americanum* 4116.
disease control, *Sclerotinia minor* blight, *Arachis hypogaea* 4100.
disease control, *Sclerotinia sclerotiorum* infection, *Brassica napus*, spore traps 8634.
disease control, seed-borne diseases, *Oryza sativa*, *Glycine max*, *Triticum aestivum* 1434.
disease control, sheath blight, *Corticium sasakii*, *Oryza sativa* 3148.
disease control, spraying equipment, foliar applications, blight, *Daucus carota* 8484.
disease control, *Triticum aestivum* 2273.
disease control, *Triticum* plant diseases, fungi 5830.
disease control, white rot, *Corioli* versicolor, pruning wounds, *Malus pumila* 6873.
disease control, *Xanthomonas phaseoli*, leafspot, *Vigna radiata* 509.
drug resistance, pathogenes, *Mangifera indica* 1532.
effects on *Candidobolus obscurus* resting spores spore germination 7762.
effects on *Gonidium penicillioideis*, biosynthesis, pectate lyase, pectin lyase 5515.
effects on *Macrophoma phaseolina* spore germination 7760.
effects on *Monilia fructicola*, growth, sporulation, isolation 2282.
effects on *Mucor mucedo* cell walls biosynthesis, association, dimorphism, factors affecting 4310.
effects on *Phytochytrium*, *Rhizidiomyces*, parasitism, *Gigaspora margarita*, *Glomus fasciculatus* 5200.
effects on *Trichothecium roseum* spore germination, in vitro 7764.
effects on *Ustilago avenae* morphology, scanning electron microscopy use 8619.
effects on vesicular-arbuscular mycorrhizas, soil 622.
Entomophthoraceae infection, *Aphis fabae*, effects on 489.
exposure, fungi, pesticides resistance 9639.
foliar application, *Glycine max* 7749.
foliar applications, *Begonia*, powdery mildew, antifungal activity 1383.
foliar applications, disease control, *Citrus paradisi*, greasy spot 5834.
foliar applications, disease control, *Tilletia controversa* bunt, *Triticum aestivum* 4111.
foliar applications, effects on rhizosphere microorganisms, *Cicer arietinum* 4254.
foliar applications, spraying equipment, disease control, blight, *Daucus carota* 8484.
Hordeum seed treatments, disease control, *Cochliobolus sativus* infection 1429.
IBP, biodegradation, flavoprotein-linked monooxygenase, *Pycularia oryzae* 5590.
inhibition, ergosterol biosynthesis, *Ustilago maydis* 1595.
inhibition, sterols, demethylation, *Saccharomyces cerevisiae* 4117.
kocio mortality, *Erynia phytomyi*, biological control, *Hypera postica* 7485.
Macrophoma phaseolina drug resistance 650.
media (selective), soil, fungi 1404.
Monilia fructicola, overwintering, *Prunus persica*, effects on sporulation 7763.
+nematodes, disease control, black shank, *Nicotiana glauca* 4125.
nitrogen fertilizers, disease control, mildew, brown rust, *Hordeum vulgare* 5838.
ornamental plants, trees, plant diseases, fungi 9480.
+pains, disease control, *Chondrostereum purpureum*, wound infection, *Prunus americana*, *Prunus avium* 8629.
powdery mildew control, *Rosa* 5044.
prevention fungi post-harvest decay, corn, seeds viability 5029.
prochloraz, *Persea gratissima*, disease control, anthracnose, stem rot 6833.
prophylaxis, treatment, *Phytophthora palmivora* infection, orchards 5828.
Pyrenopeziza, net blotch, *Hordeum vulgare*, effects on 7770.
Pycularia oryzae, blast, *Oryza sativa* 2274.
resistance, fungi, measuring techniques 7885.
resistance, fungi pathogens, ornamental plants, greenhouses 4099.
resistance, fungi, plant diseases, conferences 2730.
resistance, measuring techniques, downy mildew, in vitro, *Plasmopara viticola* 7890.
resistance, *Monilia fructicola*, infection, *Prunus persica*, pathogenicity 2278.
resistance, *Monilia fructicola*, infection, *Prunus persica*, pathogenicity 2278.
resistance, phytopathogenic fungi, plant diseases 8725.
resistance, *Phytophthora infestans*, late blight, measuring techniques, in vitro, *Solanum tuberosum* 7891.
resistance, powdery mildew, measuring techniques, *Cucumis sativus* 7888.
resistance, *Pycularia oryzae*, blast, measuring techniques, in vitro 7892.
resistance, *Venturia*, measuring techniques 7885.
saprophytes, competition, suppression, antagonism, *Fusarium udum* 5694.
screening, disease control, *Erwinia amylovora*, fireblight, seedlings, *Malus pumila* 1406.
screening, *Pinus radiata* protection 7761.
seed treatments, *Arachis hypogaea*, association, disease control 2291.
seed treatments, damping-off, seed rot, *Gossypium* 1432.
seed treatments, disease control, *Glycine max* 1428.

Fungicides, (continued)

- seed treatments, disease control, root rot, *Glycine max*, USA, Ohio 7772.
seed treatments, disease control, *Tilletia controversa* bunt, *Triticum aestivum* 4110.
seed treatments, disease control, tobacco mosaic virus, *Crotalaria juncea* 1436.
seed treatments, *Dolichos lablab* 2290.
seed treatments effects on *Glycine max* 5844.
seed treatments, fungi plant diseases, *Glycine max*, Gramineae, reviews 4132.
seed-borne fungi, antifungal activity, trees 2319.
Sphaerotheca fuliginea sensitivity, association ergosterol biosynthesis inhibition 3487.
+sulfur, disease control, *Pisum sativum*, powdery mildew, *Erysiphe polygoni* 4123.
toxicity, *Culicida* 6060.
treatment, *Asparagus officinalis* storage 4121.
treatment, brown spot, *Drechslera oryzae*, *Drechslera sorokiniana*, *Zizania aquatica* 2272.
treatment, fungi biodegradation, forest products 1400.
treatment, *grangre*, *Phoma exigua* var. *foreata*, potatoes 4055.
treatment, *Hordeum*, effects on fungi microflora 7766.
treatment, *Hordeum* plant diseases 497.
treatment, *Podosphaera leucotricha* powdery mildew, *Malus pumila*, dormancy 1394.
treatment, pruning wounds, disease control microorganisms 7767.
treatment, pythium infection, Gramineae 4114.
treatment, *Triticum aestivum* rust, association grain quality 7667.
use control, mycotoxins food contamination, animals feeds 3865.
use, fungi disease control, factors affecting, barley storage 7762.
use, insecticides, disease control, *Hordeum vulgare* 7676.
use, leafspot disease control, *Dioscorea dumetorum* 5061.
use, ornamental plants disease control 5056.
Verticillium albo-atrum, effects on pectinolytic enzymes production 7314.
weather, effects on, use, prediction, late blight, *Phytophthora infestans*, *Solanum tuberosum* 8622.
- Fungistasis**,
nutrient availability, germination, *Macrophoma phaseolina* sclerotia,
Thielaviopsis basicola chlamydospores, *Cochliobolus victoriae* conidia, soil 9570.
soil 3179.
soil properties, rhizosphere, *Cajanus cajan*, *Lathyrus sativus* 558.
transform, *Rhizopus oryzae*, *Trichophyton mentagrophytes* 8792.
Verticillium dahliae, relationship, soil depth, soil microorganisms, environmental factors 584.
- Furagin**,
synergism, bile acids, antibacterial activity, *Staphylococcus* 1618.
- Furazolidone**,
antibacterial activity, *Vibrio cholerae*, *Vibrio parahaemolyticus*, enhancement, caffeine 1550.
Campylobacter fetus, subsp. jejuni, drug sensitivity testing 4292.
drug resistance, *Salmonella typhimurium* clinical isolates 4282.
- Furfural**,
antifungal activity, wheat post-harvest decay 441.
association, ampicillin degradation kinetics, aqueous solutions 5251.
- Furmecycloz**,
disease control, white rot, *Corioli* versicolor, pruning wounds, *Malus pumila* 6873.
- Fusarium**,
antifungal activity, [1-(carboxyoxamidino)-O-alkylisourea]copper(II)
chemicals, antifungal activity 3336.
colonization, *Sorghum bicolor* stalks, roots 5715.
contamination, feeds, assays 4863.
contamination, feeds, mycotoxins 3868.
corn spoilage, storage 2069.
disease control, root rot, pathogenicity, *Medicago sativa*, Egypt 5675.
4-deoxynivalenol, food contamination, Gramineae 6687.
disease control, benomyl foliar applications, metham fumigation, *Glycine max* 5060.
extracellular enzymes, polygalacturonase biosynthesis 1922.
extracts, diabetis induction, *Pinus* 2313.
fructose production, use, sucrose, fructose syrup 8572.
Gramineae footrot pathogens antagonism, *Pseudocercospora herpotrichoides*,
Rhizoctonia cerealis 1148.
infection, *Crotalaria juncea*, symptoms, pathology 1280.
infection, Gramineae, effects on yield 7675.
infection, *Sorghum vulgare*, pathology, ergosterol 5720.
infection, vegetables, plants, disease control 2267.
interaction *Verticillium dahliae*, pectin-degrading bacteria, wilt, *Amoracia rusticana* 1253.
isolation, trees roots, stems, media (selective) 6352.
lignocelluloses biodegradation 9261.
mycotoxins, binding dehydrogenase active sites, *Saccharomyces cerevisiae* 7625.
mycotoxins, food contamination, incidence, British Isles 3878.
pathogenicity, *Phaeosorus vulgare*, association *Kievitone hydratase* biosynthesis 3455.
post-harvest decay, disease control, fungi, cantaloupes 1399.
post-harvest decay, etiology, *Manihot esculenta* 3102.
production, plants growth regulators 7491.
production, Zeaxanthone, characterization 2073.
proteins, fermented food 5611.
root rot, *Triticum aestivum*, USA, Colorado, USA, Wyoming 6776.
single-cell protein production, crop residues, food industry, industrial wastes 9112.
soil, media (isolation) 3184.
soil microorganisms, growth, spore germination, ammonia, volatiles, effects on 2349.
spore germination, iprodione, thiophanate methyl, effects on 7765.
toxicity testing, mutagenicity testing, mycotoxins, role diabetis, *Pinus* 2315.
T-2 toxin, effects on growth, *Saccharomyces cerevisiae*, *Saccharomyces carlsbergensis* 3876.
T-2 toxin, metabolites, structure, cattle 3884.
wilt, interaction, *Erwinia carotovora*, black leg, effects on, *Solanum tuberosum* 2257.
wilt, *Lycopersicon esculentum*, *Citrullus vulgaris*, disease control, use, antagonists 1354.
- Fusarium avenaceum**,
invasion, *Trifolium repens* 5692.
root rot, *Leguminosae* 5681.

- Fusarium crookwellense** sp. nov., phylogeny, ecological distribution, soil 3204.
- Fusarium culmorum**, antifungal activity, triadimenol diastereoisomers 693.
- wt** rot, antifungal activity, peracetic acid, Gramineae 1394.
- ected** roots, root residues, rote, infection, Triticum aestivum, Hordeum vulgare, Lolium perenne 3961.
- fection**, Avena, Gaumannomyces graminis suppression, soil, effects on 3205.
- fection**, Gramineae, Gaumannomyces graminis suppression, soil, effects on 3207.
- fection**, Triticum seedlings, water potential effects on pathogenicity 1149.
- ot rot**, Triticum aestivum, Hordeum vulgare 4959.
- profusarin** biosynthesis 7016.
- aralene** biosynthesis, relationship Gramineae pathogenesis 8510.
- Fusarium equiseti**, blonization, Sorghum bicolor stalks, roots 5715.
- extracts**, dieback induction, Pinus 2313.
- fection**, Crotalaria juncea, symptoms, pathology 1280.
- fection**, Oryza sativa 1192.
- ant** diseases, Vigna unguiculata, factors affecting pathogenesis 4931.
- isodexyloic** acid biosynthesis, lithocholic acid metabolism 1825.
- Vigna** unguiculata necrosis, India 2109.
- ift**, Cuminum cuminum, etiology 1300.
- Fusarium graminearum**, ar rot, blight, disease resistance, seedlings, Zea mays 1361.
- lactose** assays, use, galactose oxidase 8160.
- cellulose** oxidase purification, affinity chromatography, characterization 7364.
- mycotoxins** biosynthesis, grains substrates 8511.
- ot rot**, nitrapryn disease control, Triticum aestivum seedlings 4109.
- ot rot**, Triticum aestivum, Hordeum vulgare 4959.
- ab**, Triticum aestivum, USA, Washington 6771.
- eedling** blight, disease resistance, Triticum aestivum 4072.
- pollage**, mycotoxins contamination, preservation, corn 5643.
- ot rot**, relationship Ostria nubilalis, pests infestation, Zea mays 9349.
- aralene** radioimmunoassay 2066.
- Fusarium javanicum**, biodegradation, genistein (4'-methyl ether) 3764.
- Fusarium laterum**, extracts, dieback induction, Pinus 2313.
- Fusarium moniliforme**, ar spora, contamination, Asparagus flowers 9414.
- amylase**, hemocellulase, production 6404.
- spartic** proteinase, purification, characterization 7360.
- cellulose** biodegradation, association, carbohydrates composition 3767.
- fection**, Zearhema bicolor stalks, roots, symptoms, pathology 1280.
- mination**, heat treatments= benomyl= acetone, seed treatments, corn 5845.
- extracts**, dieback induction, Pinus 2313.
- ut rot**, disease control, fungicides, Ficus carica 1396.
- nmobilized** cells, cyanide hydratase, cyanide detoxification 9982.
- ide-3-acetic** acid, tryptophan, effects on nicotinic acid biosynthesis 1841.
- fection**, Zearhema bicolor stalks, roots, symptoms, pathology 1280.
- fection**, Draecena marginalia, insecticides soaps, foliar applications 9486.
- fection**, Emblica officinalis, ascorbic acid content 3964.
- alfspot**, Draecena marginalia, irrigation effects on pathogenesis 1274.
- inazones** antifungal activity 2476.
- ut rot**, stalk rot, pathology, Sorghum bicolor 8580.
- ed-borne** diseases, effects on, Zea mays, yield 1180.
- alk rot**, Zea mays, predisposing factors 8754.
- rulence**, parasexual cycle, soil-borne diseases 6854.
- Fusarium moniliforme f.sp. subglutinans**, dieback, Pinus eliottii, Pinus taeda 5076.
- ological** control, pest control, Henosepilachna vigintioctopunctata 1034.
- fection**, epidemiology, Pinus taeda 1467.
- itch** canker, pathogenesis, Pinus 6909.
- itch** canker, Pinus taeda seeds, epidemiology 543.
- Fusarium nivale**, infection, Hordeum vulgare, Triticum aestivum, seed treatments, use, phenylmercuric acetate 8645.
- rodione** resistance 1530.
- ed-borne** diseases, pathology, Triticum aestivum, seedlings 3937.
- Fusarium oxysporum**, antifungal activity, 1,2,4-triazolo(3,4-c)-1,2,4-dithiazoles 8788.
- asal** rot, Oryza sativa nodes, pathogenicity 3951.
- icides**, antifungal activity 5973.
- ological** control, Nilaparvata lugens, plant diseases 3719.
- cellulose** biodegradation, association, carbohydrates composition 3767.
- amping-off**, Pseudotsuga menziesii, transmission (seed) 4149.
- sease** control, quinzotene+ferbam, bulbs, Lilium 1427.
- fects** on calories content, seeds, Linum usitatissimum 7722.
- fects** on seeds germination, Phaseolus mungo 3924.
- nnatin** production, nutrient requirements 6206.
- ut rot**, Benincasa hispida, pathogenesis 3069.
- fection**, Medicago sativa, association, Rhizobium nodulation 5114.
- fection**, wilt, disease resistance, screening, Glycine max 1372.
- vasion**, Trifolium repens 5692.
- at** blight, pathology, Catharanthus roseus 3094.
- ycopersicon** esculentum roots penetration, pathogenesis 6825.
- ycorrhizas**, roots colonization, seasonal variations, Trifolium repens 554.
- trofuran** resistance, association closed circular DNA 656.
- actin** biodegradation 3775.
- etenease** production 3670.
- ot rot**, fungicides disease control, Lycopersicon esculentum Solanum melongena 6872.
- ot rot**, suppression, ectomycorrhizas, Pseudotsuga menziesii 4144.
- it**, hypocotyls, Pinus lambertiana 4160.
- ed-borne** diseases, Pinus sativum, detection 6732.
- trifluralin** biodegradation 8446.
- it**, Cucumis melo, symptoms 2214.
- it**, interaction, Erwinia carotovora, black leg, effects on, Solanum tuberosum 1251.
- Fusarium oxysporum f.sp. spili**, allows, Apium graveolens var dulce, factors affecting 5748.
- Fusarium oxysporum f.sp. cepae**, penimental infection, effects on, yield, Allium cepa 2191.
- Fusarium oxysporum f.sp. chrysanthemi**, inoculation, Chrysanthemum morifolium disease resistance 4999.
- wilt**, inoculation, pathogenesis, Chrysanthemum morifolium 5764.
- wt**, media (culture), organic compounds, effects on 4040.
- Fusarium oxysporum f.sp. clcieri**, asymptomatic infection, Ceanothus cajan, Lens esculentus, Pisum sativum 4938.
- wilt**, disease resistance, inheritance, Cicer arietinum 4062.
- Fusarium oxysporum f.sp. cucumerinum**, disease resistance, Cucumis sativus, pathogens induction 2262.
- wilt**, Cucumis sativus, disease resistance induction 465.
- wilt**, Cucumis sativus, incidence 9415.
- Fusarium oxysporum f.sp. cumini**, spore germination, antifungal activity, fruits extracts, Diospyros cordifolia 8785.
- Fusarium oxysporum f.sp. fathshederae**, wilt, Fatsihedera lizei 6802.
- Fusarium oxysporum f.sp. gladioli**, wilt, symptoms, chemical control, Gladiolus 3995.
- Fusarium oxysporum f.sp. lini**, wilt, media (culture), organic compounds, effects on 4040.
- Fusarium oxysporum f.sp. lupini**, wilt, disease resistance, Lupinus albus 9461.
- Fusarium oxysporum f.sp. lycopersica**, spore germination, antifungal activity, fruits extracts, Diospyros cordifolia 8785.
- Fusarium oxysporum f.sp. lycopersici**, infection, Lycopersicon esculentum, interaction, tomato mosaic virus 9397.
- infection**, Lycopersicon esculentum seedlings roots, pathogenesis 4028.
- interaction**, Meloidogyne incognita, effects on, Lycopersicon esculentum, growth factors, production 1276.
- Meloidogyne incognita** infection, effects on, Lycopersicon esculentum, susceptibility 1281.
- wilt**, cytopathology, Lycopersicon esculentum 3088.
- wilt**, integrated control, benomyl+nitrate+calcium oxide, Lycopersicon esculentum 4108.
- wilt**, integrated control, nitrate+calcium oxide+benomyl, Lycopersicon esculentum 4107.
- wt**, interaction Meloidogyne javanica, Lycopersicon esculentum 3990.
- wilt**, Lycopersicon esculentum, etiology 1257.
- wilt**, Lycopersicon esculentum, nitrogen nutrient effects on 411.
- Fusarium oxysporum f.sp. medicaginis**, wilt, Medicago sativa, disease resistance, inheritance 6862.
- wilt**, soil moisture, effects on, disease resistance, Medicago sativa 4097.
- virulence**, disease resistance, Medicago sativa 3914.
- Fusarium oxysporum f.sp. melonis**, invasion, soil fumigation 5898.
- Fusarium oxysporum f.sp. momordicae**, wilt, Momordica charantia, pathogenicity 3093.
- Fusarium oxysporum f.sp. niveum**, infection, susceptibility, Curcubita 4010.
- wilt**, effects on, disease resistance, Citrullus lanatus 5774.
- Fusarium oxysporum f.sp. orthoceras**, root rot, Leguminosae 5681.
- Fusarium oxysporum f.sp. psii**, Lycopersicon esculentum roots penetration, pathogenesis 6825.
- pathogenicity**, Pisum sativum, temperature effects on 7653.
- wilt**, effects on, biological control, Gossypium hirsutum 1133.
- wilt**, Pisum sativum, disease resistance, electrophoresis 4065.
- Fusarium oxysporum f.sp. radicia-lycopersici**, plant diseases, roots, crops, greenhouses, USA, North Carolina 9411.
- root rot**, epidemiology, Lycopersicon esculentum 3998.
- Fusarium oxysporum f.sp. vasinfectum**, dispersal, wilt, association, Gossypium barbadense, Israel 6817.
- soil-borne** diseases, biological control, Gossypium hirsutum 7769.
- spore** germination, stimulation, prometryne, trifluralin, roots exudates, Gossypium hirsutum 8706.
- wilt**, Abelmoschus esculentus, disease resistance 7740.
- wilt**, disease resistance, Gossypium 4086.
- wilt**, Gossypium hirsutum seeds, pathogenesis 4991.
- wilt**, Gossypium hirsutum, side-effects, herbicides 3145.
- wilt**, +Meloidogyne incognita acrita infection, disease resistance, Gossypium hirsutum 7732.
- wilt**, solar radiation, soil temperature, effects on, Gossypium barbadense, Gossypium hirsutum, yield 8606.
- Fusarium roseum**, crown rot, Medicago sativa, USA, Utah 9322.
- infection**, Medicago sativa, relationship sulfur deficiency 7658.
- root rot**, Triticum aestivum, USA, Colorado, USA, Wyoming 6776.
- stem rot**, Pseudotsuga menziesii seedlings 5875.
- Fusarium sambusium**, root rot, Leguminosae 5681.
- Fusarium semitectum**, cellulose biodegradation, association, carbohydrates composition 3767.
- extracts**, dieback induction, Pinus 2313.
- infection**, Crotalaria juncea, symptoms, pathology 1280.
- infection**, Oryza sativa 1192.
- Fusarium solani**, arylglycerol- β -syringaresinol ethers biodegradation, mechanisms, lignin models 6651.
- association** Zea mays, deoxynivalenol detection, gas chromatography 7615.
- cellulose** biodegradation, association, carbohydrates composition 3767.
- crown rot**, Medicago sativa, USA, Utah 9322.
- enzymes**, use, oxidation, syringaresinol 4730.
- extracts**, dieback induction, Pinus 2313.
- footrot**, Gossypium hirsutum seedlings, new records, India 7695.
- infection**, Crotalaria juncea, symptoms, pathology 1280.
- metabolism**, medicarpin, maackian 3779.
- post-harvest** decay, cantaloupes, control, use, benomyl+guazatine 6835.
- post-harvest** decay, disease control, fungicides, cantaloupes 1399.
- root rot**, Cymopogon tetragynolba 5676.
- root rot**, Leguminosae 5681.
- stem** canker, Ipomoea batatas 5000.
- stem** rot, leafspot, Diffenbachia maculata 1268.
- tomatine** resistance, heritability, pathogenicity, lycopersicon esculentum fruits, association, sterol composition 7049.
- tomatine** resistance, infection, pathogenicity, Pisum sativum, Lycopersicon

Subject Index

Fusarium solani, (continued)

esculentum, fruits 5741.
wilt, interactor, *Erwinia carotovora*, black leg, effects on, *Solanum tuberosum* 1251.
wilt, *Pisum* 329.

Fusarium solani f.sp.pis,

cutinase inhibition, benomyl 1414.
cutinase, penetration, pesticides (organophosphorus) inhibition, *Pisum sativum* 2279.
infection, *Pisum sativum* protection, cutinase inhibition, association, organophosphorus 500.
interaction stem rot, *Rhizoctonia solani*, *Pisum sativum* 9328.

Fusarium sulphureum,

disease resistance, *Solanum tuberosum* 5810.
wilt, interactor, *Erwinia carotovora*, black leg, effects on, *Solanum tuberosum* 1251.

Fusarium theobromae,

crown rot, *Musa sapientum*, pathogenicity 395.

Fusarium tricinum,

crown rot, *Medicago sativa*, USA, Utah 9322.
T-2 toxin biosynthesis, radioactive labelling 6705.
T-2 toxin, enzyme-linked immunosorbent assay 4891.

Fusarium udum,

competition, suppression, antagonism, soil pH, soil temperature, fungicides, herbicides, soil moisture 5694.
population dynamics, sawdust soil amendment effects on 3252.
spore germination, antifungal activity, fruits extracts, *Diospyros cordifolia* 8785.
wilt, disease resistance, screening, *Cañanus cajan* 1367.
wilt, disease transmission, *Isopthera*, *Cañanus cajan* 2967.

Fusicladium effusum,

Cladosporeum carigenum scab, inoculation time effects on pathogenesis 5736.

infection, *Carya illinoensis* scab, factors affecting disease spread 1202.

Fusidic acid,

antibacterial activity, *Staphylococcus aureus* 3383.
antibiotic resistance, *Escherichia coli* plasmids genetic control, role, chloramphenicol acetyltransferase 9649.
drug resistance, role, *Escherichia coli* chloramphenicol acetyltransferase 7907.

Fusium rust,

Cronartium quercum f.sp.fusiforme, disease resistance, genotype-environment interactions, *Pinus taeda* 6908.
Cronartium quercum, susceptibility, *Pinus* 6924.
Pinus, disease resistance 4148.

Fusion,

Escherichia coli lacZ gene, promoters, terminators, rifampicin effects on gene expression 1626.

protoplasts, hybrids, *Candida albicans*, nystatin resistance 658.

Fusobacterium,

antibacterial activity, moxalactam 5270.
clinical isolates, incubation, anaerobic environments 2680.
compound U-5730B, antibacterial activity 4379.
p-lactamase detection methodology 9037.
media (culture), nutrient requirements 5415.
niridazole antibacterial activity 3328.
role, infection, antibiotic sensitivity testing, drug sensitivity testing, man 725.

Fusobacterium necrophorum,

cattle liver abscesses isolates, antibiotic sensitivity testing 7121.
isolation, characterization, abscesses, pigs carcasses 5619.
propachlor metabolism, 2-mercato-N-isopropylacetanilide production 8365.
survival, swabs transport system, temperature association 6334.

Fusobacterium nucleatum,

antibacterial activity, *Streptococcus mutans* bacteriocins 8025.

clinical isolates, incubation, anaerobic environments 2680.

Gaeumannomyces,

sterilization, methodology, seeds, *Triticum* 5846.

Gaeumannomyces graminis,

foot rot, antifungal activity, peracetic acid, *Gramineae* 1394.
infection, bacteria antagonism, clays effects on, *Triticum aestivum* roots 3008.
infection, *Triticum aestivum*, *Hordeum vulgare*, inoculation, methodology 3949.
take-all, disease control, *Pseudomonas* seed treatments, *Triticum aestivum* 3158.
take-all, disease control, use, *Pseudomonas*, *Triticum aestivum* 4090.
take-all, effects on *Triticum* yield 371.
take-all, shading, effects on *Gramineae* senescence 3956.

Gaeumannomyces graminis f.sp.avenae,

infection, *Agrostis palustris*, pathology 5713.

Gaeumannomyces graminis f.sp.tritici,

take-all, suppression, ameba, mycophagy, crop fields 5920.

Gaeumannomyces graminis var.tritici,

growth, interaction bacteria antagonism, clays effects on 4199.
Leptomyxid lysia, phagocytosis, soil 563.
perithecia, production, methodology 2721.
soil, crops effects on survival 3954.

suppression, soil, effects on phytopathogenic fungi infection, *Avena* 3205.

suppression, soil, effects on phytopathogenic fungi infection, *Gramineae* 3207.

take-all, agricultural practices, effects on incidence, *Triticum aestivum* 9361.

take-all, crop rotation, *Triticum aestivum* 2266.

take-all, disease control, benomyl, carbendazim, *Triticum aestivum* 507.

take-all, pathogenicity, nutrient availability, soil pH effects on, *Triticum aestivum* 3013.

take-all, tridimenol seed treatments, *Triticum aestivum* 5067.

take-all, *Triticum*, association, soil water 491.

take-all, virulence, *Triticum aestivum* 2137.

Triticum aestivum take-all, ammonium fertilizer applications effects on 1331.

β-Galactofuranosidase,

role helminthospore biosynthesis, *Helminthosporium sacchari* 8504.

Galactokinase,

purification, characterization, *Mycobacterium* 5498.

purification, characterization, *Saccharomyces cerevisiae* 6420.

Galactomannan,

characterization, isolation, *Neurospora crassa* 1950.

Galactonate dehydratase,

purification, characterization, *Klebsiella pneumoniae* 6439.

Galactonate dehydratase, (continued)

purification, characterization, *Pseudomonas* 6437.

Galactose,

fermentation, lactic acid bacteria-*Streptococcus thermophilus*, cheese production 8461.

Fusarium graminearum, assays, use, galactose oxidase 8160.

Pachysolen tannophilus, ethanol fermentation 146.

Galactose dehydrogenase,

purification, characterization, *Pseudomonas fluorescens* 4608.

Galactose oxidase,

Fusarium graminearum, purification, affinity chromatography, characterization 7384.

Gibberella fujikuroi, purification, characterization 1858.

purification, characterization, *Dactylium dendroides* 4607.

use, *Fusarium graminearum* galactose assays 8160.

Galactose-binding protein,

ligands binding, *Escherichia coli* 2734.

purification, characterization, periplasmic space, *Escherichia coli* 6374.

Galactose-1-phosphate uridylyltransferase,

purification, characterization, *Saccharomyces cerevisiae* 4655.

D-Galactose-6-phosphate isomerase,

purification, characterization, *Staphylococcus aureus* 4653.

-b-D-Galactosidase,

activity, starter cultures, yogurt 7591

α-D-Galactosidase,

preparation, *Cephalosporium* 1864.

β-D-Galactosidase,

active sites, β-D-galactosylamines detection, *Escherichia coli* 8250.

activity, *Saccharomyces cerevisiae*, measuring techniques 3622.

Bacillus circulans, immobilized enzymes, activity, physicochemical properties 3515.

biosynthesis, characterization, yeasts 950.

Candida pseudotropicalis production, whey utilization 8307.

Escherichia coli, use, labelling, enzyme immunoassay, S-100 protein measuring techniques, cerebrospinal fluid, man 857.

fungi, lactose hydrolysis, skim milk yogurt production 7569.

immobilization, polyacrylamide gels 9176.

immobilized enzymes, *Lactobacillus bulgaricus*, activity preservation 7394.

immobilized enzymes, use, egg shells caries 9138.

Kluyveromyces fragilis, biosynthesis induction 6556.

Kluyveromyces marxianus, purification, characterization 4658.

Lactobacillus murinus, purification, characterization 9161.

lactose hydrolysis, whey 8471.

photosensitivity labelling, *Escherichia coli* 7421.

polyelectrolytes complex effects on kinetics, *Escherichia coli* 8256.

purification, characterization, periplasmic space, *Rhizobium trifolii* 5499.

purification, characterization, *Trigonema phagedenis* 7410.

purification methodology, *Escherichia coli* 7325.

purification, methodology, *Saccharomyces ananensis* immobilization 901.

purification, substrate specificity, *Aspergillus niger* 8252.

recombinant yeasts, solubilization methodology 103.

Streptococcus lactis, mutants, starter cultures, Cheddar cheese, organoleptic evaluation 9269.

substrate specificity, *Escherichia coli* 6493.

Vibrio cholerae, activity, rifampicin antibiotic resistance 6018.

Galactosyl farnesyl diphosphate,

synthetic intermediates, antigen O polysaccharides biosynthesis, *Salmonella*

anatum UDPGalactose 4-epimerase deficient mutant 7440.

β-D-Galactosylamine,

detection β-D-galactosidase active sites, *Escherichia coli* 8250.

Galactosylglycerol phosphate,

linkage peptidoglycans, structure, *Bacillus coagulans* 5532.

Gallae,

infection, *Rhizobium*, DNA homology, phage typing, nodulation, taxonomic significance 8696.

Gallate decarboxylase,

Citrobacter, gallic acid, pyrogallol production 3731.

Gallic acid,

biodegradation, soil microorganisms, bacteria 7583.

catabolism, *Pseudomonas testosteroni*, 2-pyrone-4,6-dicarboxylic acid biosynthesis 1849.

Citrobacter, gallate decarboxylase, pyrogallol production 3731.

Gallionella,

identification, isolation, drinking water 9818.

Gallionella ferruginea,

contamination, wells 3483.

Galls,

Entorrhiza casparyana, *Juncus articulatus* 9403.

isolation, *Agrobacterium tumefaciens*, *Vitis vinifera*, pathogenicity 5744.

Gambia,

Rhizosphora, dieback+ canker 1454.

Ganglia,

trigeminal nerve, mice, herpes simplex virus infection,

9-[2-hydroxyethoxymethyl]guanine treatment effects on reactivation 7107.

Gangrene,

Phoma exigua var.foveata, epidemiology, *Solanum tuberosum* 6827.

Phoma exigua var.foveata, potatoes, fungicides treatment 4055.

Phoma exigua var.foveata, pathogenesis, *Solanum tuberosum* 9446.

Gardnerella,

infection, trees, wind barriers, distribution 4175.

Ganoderma applanatum,

infection, 7-hydroxycalamene detection association response 6844.

post-harvest decay, *Hevea brasiliensis* cellulose, lignins, Malaysia 7791.

Ganoderma japonicum,

glucans, antitumour activity, mice 7453.

Ganoderma lucidum,

glycans, isolation, purification, characterization 6580.

Garcinia kola,

fruits, extracts, kolonane, antimicrobial activity 1588.

Gardnerella vaginalis,

antibacterial activity, cephradine 8836.

media (isolation), clinical microbiology 9030.

metronidazole, antibacterial activity 3331.

Gas chromatography,

amino sugars, sugars, cell walls, bacteria 9877.

analyses, production, wine, musts, vinegar 9234.

- Gas chromatography, (continued)**
biodegradation, glycols, industrial pollution, microorganisms, measuring techniques 5577.
detection, deoxyvalenol, *Fusarium solani*, association, *Zea mays* 7615.
detection, mannose, arabinofitol, diagnosis, candidiasis 9993.
Endomycopsis lipolytica, detection 2-oximino acid 1843.
Escherichia coli, detection methodology, muramic acid, diaminopimelic acid, alanine enantiomers ratio 7240.
Gram-negative bacteria lipopolysaccharides pyrolysis, association, differentiation 4490.
identification, bacteria, food contamination 236.
indole-3-acetic acid, mycorrhizas 8171.
measuring techniques, carbon dioxide gas production, fungi, decomposition, wood, *Fagus sylvatica* 9530.
methodology, infection, *Escherichia coli*, *Klebsiella*, urinary tract infection 9929.
muramic acid, indicators biomass, bacteria, sediments, estuaries 9027.
phenylacetic acid, production, Bacteroides melanogenicus subsp. intermedius 5452.
Streptococcus faecalis fatty acids, use, capillary column 5429.
Streptococcus identification, computer applications 2672.
urine volatiles, bacteremia diagnosis, man 6315.
use, characterization, differentiation, *Gremmeniella abietina*, races 4531.
yeasts, hydrocarbons, methodology 7271.
- Gas exchange,**
Alnus rubra nodules, nitrogen-fixing bacteria, measuring techniques 1496.
- Gas production,**
association, cheese maturation 237.
bacteria, association, growth, kinetics, mathematical models 9873.
bacteria, wetwood, *Ulmus americana* 2323.
Clostridium botulinum, relationship toxins production 2960.
detection, identification, Enterobacteriaceae 6311.
fungi, yogurt, identification 4840.
hydrocarbons, anaerobic conditions, soil microorganisms, soil types 9567.
hydrogen, Enterobacteriaceae, formal conversion 4708.
hydrogen, *Trifolium repens*, nodulation, *Rhizobium trifolii* 3245.
methane, microorganisms, animal wastes fermentation, antibiotics effects on 1039.
- Gas-liquid chromatography,**
identification, *Clostridium difficile* 840.
- Gases,**
assays, fermentation equipment 9825.
coal, wastewater treatment, filters, anaerobic microorganisms 8952.
environments, crop residues fermentation, *Aspergillus oryzae*, *Trichoderma reesei*, *Streptomyces*, reviews 4723.
flooded beds, growth, *Saccharomyces cerevisiae* 6353.
sterilization, sterilization methodology 8801.
solubility, media (culture), microorganisms, reviews 8082.
spoilage, storage, *Lactobacillus*, spoilage, frankfurters, pork 5639.
- Gasteromycetes,**
ectomycorrhizas, evolution, reproductive strategy 9535.
- Gastritis,**
mushroom poisoning, *Omphalotus olearius*, man 7582.
- Gastroenteritis,**
bacteria isolates, antibiotic sensitivity testing, drug sensitivity testing 5251.
Escherichia coli, isolation methodology effects on, pathogenicity 177.
food poisoning, *Campylobacter fetus* subsp. jejuni, man 2040.
man, food consumption, oysters, Norway agent food poisoning 1072.
man, Norway agent, infection, association swimming, epidemiology 1709.
man, Norway agent, water-borne diseases, drinking water 2633.
- Gastrointestinal tract,**
anaerobic bacteria, decontamination, use, antibiotics, man, in vitro 8812.
clinical isolates, norfloxacin antibacterial activity 2455.
immune response, *Candida utilis* single-cell protein, feeding trials, pigs 2929.
- Geytiarsacia,**
Monilia infection 4012.
- Geytiarsacia bacata,**
Monilia polycodii infection 4012.
- Gel chromatography,**
Corynebacterium diphtheriae toxins, purification 8514.
detection, aflatoxin B1, feeds 2067.
detection, aflatoxin M1, milk 5642.
- Gel electrophoresis,**
nucleic acid, potato spindle tuber viroid, extraction methodology 8101.
proteins, *Erwinia*, strains 3582.
purification, enterotoxins, *Escherichia coli* 290.
- Gel filtration,**
methodology, efficacy, disinfectants antiviral activity 9694.
papilloma virus (bovine) purification 1747.
- Gels,**
hydrolysis, proteinase, *Aspergillus sojae*, carbon sources, nitrogen sources 8309.
- Gels,**
calcium alginate, Glucanobacter oxydans immobilized cells, glucose metabolism kinetics, gluconic acid biosynthesis 5467.
carrageenans, fumarate hydratase stability, *Brevibacterium flavum* immobilized cells 7344.
cellulose, *Acetobacter acetii* subsp. xylinum, crystallinity 8328.
food storage, preservation, plants pathogens 2688.
comparison, *Pseudomonas* extracellular polysaccharides 980.
immobilization, *Saccharomyces cerevisiae*, β -D-fructofuranosidase activity, methodology 4532.
poly(acrylate), use, Penicillium funiculosum cellulase recovery, separation techniques, association, glucose 8313.
polycrylamide, β -D-galactosidase immobilization 9176.
polymerization, immobilized cells, immobilized enzymes 9008.
stannous fluoride, dental caries prophylaxis, man 8967.
- Geminivirus,**
DNA clones, nucleotide sequence role, *Nicotiana benthamiana* infectivity 9370.
plant diseases, tropical environment 4921.
- Gene amplification,**
bacteria, temperature jump studies, use, microwave oven 9892.
- Gene distribution,**
Streptomyces, antibiotics biosynthesis 1594.
- Gene expression,**
lacZ gene, fusion, promoters, terminators, rifampicin effects on *Escherichia coli* 1626.
rabies virus glycoproteins analogs, *Escherichia coli* 8046.
- Gene frequency,**
virulence, *Puccinia graminis* f.sp. tritici, stem rust, *Erysiphe graminis* f.sp. hordei 5041.
- Gene mapping,**
complementation genetic analysis, melanins deficient mutant, association *Gossypium* wilt, *Ventilum dahliae* 6796.
pyrrolin-5-carboxylate reductase, protein biosynthesis, purification, *Escherichia coli* 1830.
Salmonella typhimurium, genetic analysis, methodology, reviews 9052.
Staphylococcus aureus, protoplasts fusion, computer applications 4508.
Streptomyces venezuelae, chloramphenicol biosynthesis 4388.
- Gene products,**
dnaA gene, DNA-binding protein, purification, *Escherichia coli* 1844.
- Gene regulation,**
tox focus, phytochemicals biosynthesis, *Cochliobolus heterostrophus* 2953.
- Gene transfer,**
antibiotic resistance, *Escherichia coli*, enterotoxins plasmids 3299.
plants, Ti plasmid, *Agrobacterium tumefaciens* infection 4922.
plasmids, drug resistance, trimethoprim, Enterobacteriaceae 3298.
toxins, *Escherichia coli*, phages conjugation, toxicity, laboratory animals, domestic animals 9315.
- Genes,**
acidin, biosynthesis, cloning, *Streptomyces* 8032.
antibiotic resistance, nutrition, cloning, *Streptomyces vinaceus*, *Streptomyces coelicolor* 1523.
antibiotic resistance, *Streptomyces azureus*, *Streptomyces erythraeus*, *Streptomyces vinaceus*, *Streptomyces fradiae*, cloning 1521.
Bacillus thuringiensis, δ -endotoxin 1107.
disease resistance, *Avena sativa*, virulence, *Puccinia coronata* 5035.
disease resistance, *Hordeum vulgare*, selection, virulence, *Erysiphe graminis* f.sp. hordei, powdery mildew 8550.
disease resistance, identification, *Oryza glaberrima*, rice yellow mottle virus infection 4988.
disease resistance, *Lactuca sativa*, downy mildew, *Bremia lactucae* 3126.
disease resistance, *Oryza sativa*, blight, *Xanthomonas campestris* 9459.
Erysiphe graminis f.sp. tritici infection disease resistance, *Triticum aestivum*, cell walls chemical composition association 9476.
gene Gm, disease resistance, potato virus M, hybrids, *Solanum gourlayi* x *Solanum tuberosum* 2247.
N⁺ gene, *Nicotiana glauca*, role, disease resistance, association, tobacco mosaic virus coat protein 8844.
Hordeum, leaf rust disease resistance, histology 2265.
Ht gene, *zea mays*, disease resistance, virulence, leaf blight, *Exserohilum turcicum* 1370.
Hm gene, *zea mays*, disease resistance, leaf blight, *Exserohilum turcicum* 5710.
maize dwarf mosaic virus disease resistance, levels, genetic analysis, plant breeding, *Zea mays* 4092.
nif gene, association *Klebsiella pneumoniae* nitrogen fixation 1495.
nitrogenase, transcription, *Rhizobium meliloti*, nodulation, *Medicago sativa* 3226.
Pa gene, *Hordeum vulgare*, rust, *Puccinia hordei* 1349.
pest resistance, disease control, tungro virus, *Nephotettix virescens*, *Oryza sativa* 5548.
phos gene relationship, phosphate-binding protein biosynthesis, *Escherichia coli* 4553.
poA gene, *Escherichia coli* amber mutant, characterization, enzymes isolation 7379.
regulation, *Escherichia coli* methionine biosynthesis, mutation effects on 7481.
RNA polymerase, poB operon, *Escherichia coli*, rifampicin effects on transcription 1627.
rRNA 21S, yeasts mitochondria, erythromycin resistance 1526.
Rps6 gene, Glycine max, role, disease resistance, *Phytophthora megasperma* f.sp. glycine, infection 2252.
Solanum tuberosum, disease resistance, potato virus X 3119.
tet gene, *Escherichia coli* plasmids, antibiotic resistance, association, cadmium sensitivity 1536.
tetrahydrofolate dehydrogenase, trimethoprim, drug resistance, *Escherichia coli*, *Klebsiella pneumoniae* 1522.
thymidine kinase, DNA polymerase, mutation, 9-(2-hydroxyethoxymethyl)guanine drug resistance, herpes simplex virus 7874.
ton A gene, *Escherichia coli*, proteins, association sideromycin antibiotic resistance 641.
transfer, *Pseudomonas aeruginosa*, antibiotic resistance, plasmids 1544.
Triticum aestivum, disease resistance, powdery mildew, *Erysiphe graminis* 2256.
Venturia inaequalis, benomyl resistance 5152.
virulence, *Ustilago nuda*, loose smut, *Hordeum* 4967.
- Genetic analysis,**
antibiotic resistance enhancement mechanisms, *Escherichia coli* 7894.
AraC-like hydrophobic, disease resistance, leafspot, *Cercospora arachidicola* 452.
Aspergillus sojae taxonomic significance, soy sauce fermentation 115.
disease resistance, *Hordeum*, powdery mildew, *Erysiphe graminis* 471.
disease resistance, scald, *Rhynchosporium secalis*, *Hordeum vulgare* 451.
disease resistance, wheat mosaic virus infection, *Triticum aestivum* 2240.
Erysiphe graminis f.sp. tritici, mutants, virulence, powdery mildew, *Triticum aestivum* 356.
Pseudomonas aeruginosa β -lactamase biosynthesis 8287.
Puccinia graminis f.sp. dactylidis, stem rust, *Dactylis glomerata* 357.
Streptomyces hygroscopicus, tunicamycin, biosynthesis, continuous culture 762.
Triticum aestivum, disease resistance, stem rust, *Puccinia graminis* f.sp. tritici 453.
- Genetic control,**
disease resistance, stem rust, *Triticum aestivum* 7731.
disease resistance, stem rust, *Triticum turgidum* 7728.
Hordeum vulgare disease resistance, *Erysiphe graminis* f.sp. hordei infection 6840.
mequinone biosynthesis, bacteria, reviews 6628.
Nicotiana tabacum tumors morphology, *Agrobacterium tumefaciens* crown gall 7689.
plasmids, antibiotic resistance, *Escherichia coli* 2394.
plasmids, toxins, production, *Bacillus anthracis* 2085.
poly(glutamic acid) biosynthesis, *Bacillus subtilis* 911.
Thiodopseudomonas capsulata nitrogenase activity 19.
Triticum aestivum disease resistance, leaf rust, computer applications, USA, North Dakota 7730.
- Genetic engineering,**
Agrobacterium tumefaciens crown gall, plants 9318.
Agrobacterium tumefaciens, Ti plasmid, crown gall 5788.
Bacillus, production, enzymes, toxins 987.
bacteria, amino acids production, fermentation 9117.

Genetic engineering, (continued)

bacteria, yeasts, plasmids, methodology 5364.
Escherichia coli, citrate synthase production 2786.
 fermentation yeasts 3744.
 foot-and-mouth disease vaccines production, reviews 8921.
 microorganisms 9101.
 microorganisms, antibiotics biosynthesis 7974.
 microorganisms, fermentation, books 7276.
 microorganisms, fermentation, reviews 6585.
 microorganisms, products biosynthesis, books 8175.
 role, bacteria antibiotics production 1601.
 secretin biosynthesis, *Escherichia coli* 1970.
 viruses, vaccines 3453.
 viruses vaccines, production 3452.
 yeasts fermentation 7526.
 yeasts, fermentation, beer 2859.

Genetic factors,

Brevibacterium ammoniagenes permeability mutants, inosinic acid biosynthesis enhancement 1847.
 disease resistance, host-pathogen interactions, plants 468.

Genetic variance,

Triticum aestivum disease resistance, *cephalosporium gramineum* 7747.

Genistein (4'-methyl ether),

biodegradation, *Fusarium javanicum* 3764.

Genotype-environment interactions,

Conarium quercum f.sp. *lusiforme*, fusiform rust, disease resistance, *Pinus laevis* 6908.
 downy mildew, *Sclerospora graminicola*, pathogenicity, cultivars, *Pennisetum americanum* 6755

Genotypes,

host plants, effects on urediniospores, *Puccinia arachidis* inoculation, *Arachis hypogaea* 5683.
Plum sativum, *Rhizobium leguminosarum* nodulation nitrogen fixation association 5951.
 screening, disease resistance, rust, *Dactylis glomerata* 6856.
Trifolium incarnatum, *Rhizobium trifolii* strains nodulation, relationship nitrogen fixation 7847.

Gentamicin,

= ampicillin, \pm cephalamidine, antibacterial activity, *Streptococcus faecalis*, *Streptococcus faecium* 7982.
 antibacterial activity, antibiotic synergism, cefotaxime, carbenicillin, ampicillin, *Proteus*, *Pseudomonas aeruginosa* 7967.
 antibacterial activity, bacteria clinical isolates, meta analysis 7074.
 antibacterial activity, *Legionella pneumophila* 9738.
 antibacterial activity, *Pseudomonas* 7975.
 antibacterial activity, *Pseudomonas aeruginosa* 1624.
 antibacterial activity, *Salmonella* strains 8815.
 antibacterial activity, *Serratia marcescens* 4384.
 antibacterial activity, *Staphylococcus*, clinical isolates 8604.
 antibiotic resistance, bacteria isolates, hospitals 8732.
 antibiotic resistance, *Enterobacteriaceae*, *Pseudomonas* 2393.
 antibiotic resistance, *Escherichia coli*, urinary tract clinical isolates 7034.
 antibiotic resistance plasmids, *Enterobacteriaceae*, distribution 3302.
 antibiotic resistance, plasmids, *Staphylococcus aureus* 6019.
 antibiotic resistance, *Pseudomonas aeruginosa* 7023.
 antibiotic resistance, *Pseudomonas aeruginosa*, β -lactam antibiotics antibacterial activity 740.
 antibiotic resistance, *Salmonella typhimurium* clinical isolates 4282.
 antibiotic resistance, *Staphylococcus aureus*, conjugate plasmids analysis 8738.
 antibiotic resistance, *Staphylococcus aureus*, Eire hospitals isolates, plasmids role 7032.
 antibiotic resistance, virulence, natural selection, *Pseudomonas aeruginosa* 6012.
 antibiotic sensitivity testing, *Campylobacter fetus* subsp. *jejuni*, clinical isolates 6099.
 antibiotic sensitivity testing methodology comparison, gram-negative bacilli 6090.
 antibiotic sensitivity testing, *Pseudomonas aeruginosa* 1600.
 antibiotic sensitivity testing, *Pseudomonas aeruginosa*, methodology comparison 571.
 antibiotic synergism, azlocillin, *Pseudomonas aeruginosa* 8849.
 antibiotic synergism, carbenicillin, piperacillin, antibacterial activity, *Pseudomonas aeruginosa* 755.
 bactericidal activity, pharmacokinetics, in vitro 4386.
 binding, filters, membrane filtration, enzymes inactivation 5258.
 bioassays 4385.
 biosynthesis, bacteria, fermentation, aeration, agitation 7153.
 biosynthesis, *Micromonospora*, association, inoculum quality 6159.
 biosynthesis, *Micromonospora sagamiensis*, mutants, cobalt, regulation 6195.
 blood levels, bioassays 8856.
Campylobacter fetus subsp. *jejuni* drug sensitivity testing 4292.
 +carbenicillin, antibiotic synergism, antiviral activity, *Pseudomonas aeruginosa* 28.
 ceftizoxime, antibiotic synergism, antibacterial activity, gram-negative bacteria isolates 2539.
 +ceftriaxone, antibiotic synergism, *Pseudomonas aeruginosa* 7986.
 cephalothin, antibiotic synergism, antibacterial activity analysis, methodology, *Klebsiella pneumoniae* 6123.
 +chloramphenicol, removal *Mycoplasma* contamination, viruses culture collections 6293.
 clinical assays, serum levels, radioimmunoassay, enzyme immunoassay 3413.
 comparison aztreonam, antibacterial activity, gram-negative bacteria 8816.
 disc-diffusion test, streptococcus group D 2509.
 drug resistance, plasmids, conjugation, *Staphylococcus* 3273.
 enzyme immunoassay, automated methods 3414.
 +formimidoyl thienamycin, +amikacin, antibiotic synergism, antibacterial activity, *Streptococcus faecalis* 3417.
 +N-formimidoyl thienamycin, antibiotic synergism, antibacterial activity, *Streptococcus faecalis*, *Streptococcus faecium* 1623.
 β -lactam antibiotics inactivation 6108.
 + β -lactam antibiotics, stability, storage 9710.
 +media (selective), screening, *Micromonospora*, aminoglycoside antibiotics production 6107.
 monoclonal antibodies, fluorescence immunoassays 9763.
 +moxalactam, bactericidal activity, antibiotic synergism, *Pseudomonas aeruginosa* 2530.
 pharmacokinetics, bactericidal activity, *Escherichia coli*, in vitro 4387.

Gentamicin, (continued)

Pseudomonas aeruginosa antibiotic sensitivity testing 7068.
 resistance, association, modification enzymatic, aminoglycoside antibiotics, *Pseudomonas aeruginosa*, *Enterobacteriaceae* 640.
 resistance, bacteria, septicaemia, man 645.
 resistance, gram-negative bacilli, antibiotic sensitivity testing, β -lactam antibiotics 4342.
 resistance, relationship, cations effects on protein H1 biosynthesis, *Pseudomonas aeruginosa* envelopes 5158.
 resistance, *Staphylococcus aureus*, aminoglycoside antibiotics susceptibility 2413.
 resistance, *Staphylococcus aureus*, mechanisms 7026.
 resistance, *Staphylococcus aureus* nosocomial infection 649.
 resistance, *Staphylococcus faecalis* clinical isolates 6027.
 sensitivity, bacteria, urinary tract isolates 8813.
Staphylococcus clinical isolates, susceptibility 3281.
 susceptibility enhancement, *Staphylococcus aureus*, role, N,N-dicyclohexylcarbodiimide, nigericin 8654.
 +vancomycin, \pm rifampicin, antibiotic synergism, antibacterial activity, methicillin resistance *Staphylococcus* 7126.
 +vancomycin, antibiotic synergism, antibacterial activity, *Staphylococcus aureus* 771.
Yersinia pestis antibiotic sensitivity testing 6110.

Gentamicin C,
 antibacterial activity, synthesis 3416.

Geniella amarilla,
 mycorrhizas, nutrient status, seasonal variations 1490.

Geographical distribution,
 artichoke latent virus characterization, ultrastructure, plant diseases 315.
Phymatognathus omnivorus, limiting factors, soil characteristics, environmental requirements 9557.
Spiroplasma citri, brittle root, epidemiology, *Armoracia rusticana* 3059.

Geotrichum,
 cellulase, kinetics 4586.
 food contamination, canned products, counting methods 4776.
 fungal flora, *Fagus grandifolia* bark 1438.

Geotrichum asteroides,
 triacylglycerol lipase purification 7341.

Geotrichum candidum,
 biodegradation, crop residues, *Oryza sativa* 168.
Candida krusei, *Hansenula anomala*, mixed culture, protein biosynthesis, whiskey distilleries wastes 15.
 Citrus limon, factors affecting, susceptibility, sour rot 2146.
 ethyl acetate reduction, ethyl 3-hydroxybutyrate production 7466.
 +Penicillium digitatum, infection synergism, citrus 440.
 post-harvest decay, cantaloupes, control, use, benomyl+guazatine 6835.
 post-harvest decay, disease control, fungicides, cantaloupes 1399.
 single-cell protein, production, distilleries, industrial effluents, nutritive value, feeding trials, rats 8489.
 sour rot, lemons, post-harvest decay, disease control, CGA-84251 1322.
 triacylglycerol lipase, carbon sources, effects on, biosynthesis 102.
 triacylglycerol lipase production, carbon sources, nitrogen sources 7320.

Geotrichum lactis,
 exo-1,3- β -D-glucanase, self-association 44.

Geraniol,
 metabolism, *Pseudomonas putida*, role, plasmid pSRQ50 6642.

Geraniol-CoA carboxylase,
 purification, characterization, *Pseudomonas citronellolis* 8234.

Geranylgeranyl pyrophosphate synthetase,
 purification, characterization, *Bacillus subtilis* 1916.

Geriatrics,
 man, *Salmonella dublin* infection, association cow's milk drinking 5616.

Geriatrica nivella,
 seed-borne diseases, pathology, *Triticum aestivum*, seedlings 3937.

German Dem. Rep.,
 surface water contamination, viruses 3477.

Germanic acid,
 effects on glucose fructose equilibrium, *Arthrobacter xyloxe isomerase* immobilized enzyme use, feeds syrups production 4864.
 interaction, glucose, fructose, relationship, D-glucose isomerase, *Arthrobacter* 1936.

Germany, Fed. Rep.,
 sewers, concrete walls corrosion, *Thiobacillus* enumeration 7537.
 soil, keratinophilic fungi, incidence 3185.
 water supplies, bacteria levels 1716.

Germicides,
 disinfection, hand, man 816.
 drug sensitivity testing, methodology, bacteria 5192.
 hospitals disinfection 9821.

Germination,
Bacillus cereus spores, heat resistance, association, diarrhoea, emetics, food contamination, man 193.
 conidia, *Maria conopsea*, fixation, potassium permanganate use 4519.
 inhibition, *Cuscuta* seeds, bacteria activity 8577.
 Phytophthora, forests soil effects on 1483.
 pollen, *Beta vulgaris*, beet mosaic virus, beet yellows virus infection effects on 2163.
 Pythium splendens suppression, pasture soil 9551.
Sclerotinia minor, sclerotia, soil pH, *Arachis hypogaea* leaves volatiles effects on 4937.
 Sclerotium rolfsii sclerotia, factors affecting, soil 9570.
 seeds, exudates, carbon sources, bacteria soil 551.
 seeds, Glycine max, *Cercospora kikuchi* effects on 4939.
 seeds, Zea mays, *Gossypium hirsutum*, *Triticum aestivum*, *Azotobacter chroococcum* stimulation 3194.
 spores, fungi, thiosphere, *Cajanus cajan*, *Lathyrus sativus* 558.
 spores, *Puccinia melanocephala* leaf rust pathogenesis 5718.
Triticum aestivum seeds, fungi infection 8600.

Germplasm,
 analysis, *Oryza sativa*, *Xanthomonas oryzae* leaf blight, disease resistance 5811.
Arachis hypogaea, disease resistance, *Cyclindrodolium crotalariae* infection 474.
Arachis hypogaea, disease resistance, *Pythium myriotylum* 9474.
 cassava common mosaic virus elimination, disease control, Manihot esculenta 137.
 Curcubita pepo, disease resistance, vegetable marrow mosaic virus 3116.
 disease resistance, *Sclerospora graminicola* downy mildew, *Pennisetum typhoides* productivity 473.

periplasm, (continued)

- downy mildew resistance, *Zea mays*, population genetics 8626.
Helianthus annuus, screening, disease resistance, rust, *Puccinia helianthi* 4064.
 Lycopersicon esculentum, tobacco mosaic virus infection 2184.
Pennisetum americanum cultivars, susceptibility, maize dwarf mosaic virus 9360.
 plant breeding, disease control, viruses, crops 2242.
 plants, viruses infection, seed-borne diseases, surveys 2092.
 reaction, *Vigna unguiculata*, infectious diseases 5688
 screening, *Triticum*, brown rust, stripe rust, field trials, disease resistance development, India 5726.
Stenotaphrum secundatum, susceptibility, infection, *Pyricularia grisea* 7665.
Zea mays, leaf blight incidence 2131.
- seawater**
 host range, tobacco mosaic virus 9421.
- Gibberella fujikuroi**
 galactose oxidase, purification, characterization 1858.
 gibberellins synthesis, use, steviol 5558.
 kaurenoid biosynthesis 968.
 kaurenoid biosynthesis 2853.
- Gibberella zeae**
 ear rot, virulence, relationship, *Zea mays*, genotypes 3945.
 genetic analysis, methodology 9064.
 infection, *Avena*, *Gaeumannomyces graminis* suppression, soil, effects on 3205.
 infection, *Gramineae*, *Gaeumannomyces graminis* suppression, soil, effects on 3207.
 infection, *Triticum*, vomitoxin distribution 8546.
 pathogenicity, *Zea mays*, biological properties 1167.
 scab, *Triticum aestivum*, USA, Washington 6771.
 stalk rot, relationship *Ostrinia nubilalis*, pests infestation, *Zea mays* 9349.
- Gibberella acicola**
 effects on *Trichoderma reesei* cellulase production, spore germination 8320.
 effects on *Vicia faba* phyllosphere microorganisms 9601.
- Gibberella**
 biosynthesis inhibitors, inhibition abscisic acid biosynthesis, *Cercospora rosicola* 3646.
 foliar applications effects on seeds microflora, *Glycine max* 5671.
 Fusarium production 7491.
 like compounds, Cyindrocarpon destructans biosynthesis, relationships, pathogenicity, *Abies alba* 4174.
 synthesis, *Gibberella fujikuroi*, use, steviol 5558.
- effects on, *Graphium penicillitoides*, biosynthesis, pectate lyase, pectin lyase 5515.
- effects on *Melampsora larici-populina* growth, leaves culture, *Populus* 6880.
- Gliospora**
 association, *Populus*, incidence, USA, Iowa 5851.
 effects on, *Sophora secundiflora*, seedlings growth, phosphorus uptake 583.
 endomycorrhizas, spores abundance, rhizosphere, land reclamation, mines 9541.
Glycine max, soil temperature effects on 2332.
- Gliospora margarita**
 +fertilization, effects on *Juniperus chinensis* var. *sargentii* 4134.
 fungicides, effects on, *Phytochytrium*, *Rhizidiomycopsis*, parasitism 5200.
 identification, use, enzyme-linked immunosorbent assay 7273.
 mycorrhizas, hydroponics culture, *Trifolium repens* 2716.
 symbiosis, *Trifolium repens*, potassium permanganate effects on 8671.
 vesicular-arbuscular mycorrhizas, *Lolium perenne*, carbon sources competition 564.
 vesicular-arbuscular mycorrhizas, phosphate uptake, seedlings, trees 9503.
- Gliospora reticulata sp. nov.**
 isolation, USA, Rhode Island, USA, Massachusetts, characterization 4187.
- Gingiva**
 man, bacteremia, povidone-iodine treatment 815.
- gingivitis**
 association, oral hygiene, fluoride applications, children 8076.
 children, prevention 6282.
 dental hygiene, dental floss, man 8965.
 mouth, antibacterial activity,
 1,4-bis-(N-hexylcarbamylguanidine)propylpiperazine dimethanesulfonate 813.
- gliadlious**
 infection, bean yellow mosaic virus, clover yellow vein virus 3075.
 susceptibility, cucumber mosaic virus 2171.
Uromyces transversalis rust, Brazil, new records 2203.
 wilt, *Fusarium oxysporum* f.sp. *gladioli*, symptoms, chemical control 3995.
- glass**
 capillary, bacteria deposition, mathematical models 9884.
 surfaces, bacteria removal 4456.
- glass beads**
 solid phase methods, enzyme-linked immunosorbent assay, rotavirus (human) infection 5370.
- Gleditsia triscanthos**
 canker, pathogenesis 1460.
Nectria cinnabarina canker, association roots pruning 9525.
 pathology, canker, *Nectria cinnabarina* 2314.
- Gilding bacteria**
 N-acylaminosulfonates, purification methodology 4509.
- Gliocladium**
 invasion, *Trifolium repens* 5692.
- Gliocladium roseum**
 apples, post-harvest decay, pathogenesis, amino acids, levels 1324.
 soil, herbicides effects on 8707.
- Gliocladium virens**
 gliovirin, role, biological control, *Pythium ultimum* 5831.
 gliovirin, structure 1648.
- Gliocladium zaleskii**
 phytooxins purification, characterization 2063.
- gliovirin**
 Gliocladium virens, role, biological control, *Pythium ultimum* 5831.
 structure 1648.
- Globomycin**
 treatment, association, *Escherichia coli*, β -lactamase precursors biocommutation 7350.
- Gloeococcopsis sorghi**
 immobilized cells, cyanide hydratase, cyanide detoxification 9982.
- Gloeodes pomigena**
 sooty blotch, orchards, *Malus* 6874.
- Gloeophyllum trabeum**
 cell walls, chitin, colorimetry, methodology 8157.
 wood decay assays, pick test 4182.
 wood decay, *Chamaecyparis nootkatensis* 3177.
- Gloeosporium theae-arenense**
 anthracnose, *Camellia sinensis* 4014.
- Gloeotrichia natans**
 nitrogen fixation, *Oryza sativa*, USSR 7846.
- Glomerella**
 mycospores, structure 3728.
 pathogenicity, fruit rot, *Lycopersicon esculentum* 1301.
- Glomerella cingulata**
 ascospores, disease spread, epidemiology, *Malus domestica* 8570.
 bitter rot, pathogenicity, *Malus pumila* 9377.
 Colletotrichum coffeanum infection association, *Coffea arabica*, pathogenesis 9379.
 dieback, canker, susceptibility, *Camellia reticulata*, pathology 2190.
 fruit rot, *Malus pumila* 1215.
 fruit rot symptom, *Prunus persica* 5735.
 latent infection, *Capsicum annuum*, role, phytoalexins 4070.
 pectinase, fruit rot, *Lycopersicon esculentum* 5797.
 rot, *Capsicum* fruitsoons, association, iron 3999.
- Glomerella cingulata var. minor**
 anthracnose, *Persea gratissima*, disease control, prochloraz 6833.
- Glonus**
 association, *Populus*, incidence, USA, Iowa 5851.
 chlamydospores, antisera production 6965.
 effects on, *Sophora secundiflora*, seedlings growth, phosphorus uptake 583.
 endomycorrhizas, spores abundance, rhizosphere, land reclamation, mines 9541.
Glycine max, soil temperature effects on 2332.
 interspecific relationships, competition, mycorrhizas, *Zea mays*, *Allium* 5894.
 pathogenicity, fertilizers induction, association liquidambar styraciflua 6971.
 symbiosis *Allium cepa*, growth association 9549.
 vesicular-arbuscular mycorrhizas, phosphate uptake, seedlings, trees 9503.
- Glonus aggregatum**
 vesicular-arbuscular mycorrhizas, *Pinus banksiana*, *Agropyron trachycaulum*, petroleum sand 5916.
- Glonus caledonium**
 interspecific relationships, competition, mycorrhizas, *Zea mays*, *Allium* 5894.
- Glonus caledonium**
 growth, in vitro 6945.
 spore germination, amino acids stimulation 4189.
 vesicular-arbuscular mycorrhizas, role, growth, nutrient uptake, *Medicago sativa*+*Rhizobium meliloti* nodulation, phosphorus fertilizers effects on 6943.
- Glonus clairodium**
 pathogenicity, fertilizers induction, association liquidambar styraciflua 6971.
- Glonus clarius**
 interspecific relationships, competition, mycorrhizas, *Zea mays*, *Allium* 5894.
- Glonus clarius**
 pathogenicity, fertilizers induction, association liquidambar styraciflua 6971.
- Glonus epigaeum**
 spore germination, *Poncirus trifoliata*+*Citrus sinensis* roots exudates effects on 1477.
 symbiosis, *Malus*, effects on growth 5097.
- Glonus epigaeus**
 endomycorrhizas, colonization, growth, phosphorus nutrient availability effects on, *Malus pumila*, *Allium porrum*, *Tagetes patulus* 9543.
 endomycorrhizas, nutrient uptake, nutrient availability, phosphorus, *Malus pumila*, *Allium porrum*, *Tagetes patulus* 9544.
 vesicular-arbuscular mycorrhizas, growth levels, roots, stimulation growth 9560.
- Glonus etunicatus**
 inoculation, *Trifolium repens* 2348.
 pathogenicity, fertilizers induction, association liquidambar styraciflua 6971.
 stimulation, phosphorus uptake, drought tolerance, *Allium cepa* 4200.
 +*Trifolium repens*, effects on yield 2330.
- Glonus fasciculatus**
 symbiosis, *Ornithogalum umbellatum*, cell walls structure 6357.
- Glonus fasciculatus**
 alkaline phosphatase, acid phosphatase, roots, *Arachis hypogaea* 6947.
- Glonus fasciculatus**
 effects on protein composition, nitrogen levels, *Arachis hypogaea* 6949.
 endomycorrhizas, phosphorus nutrient availability, roots levels, carbohydrates, *Trifolium subterraneum* 9578.
 fungicides, effects on, *Phytochytrium*, *Rhizidiomycopsis*, parasitism 5200.
 growth, *Lycopersicon esculentum*, roots exudates, ozone pollution effects 7811.
 interaction, *Streptomyces cinnamonomeus*, effects on, *Eleusine caracalis*, growth 2341.
 mycorrhizas, nutrient status, nitrogen, phosphorus, *Buteloua gracilis* 1485.
 pathogenicity, fertilizers induction, association liquidambar styraciflua 6971.
 phosphate fertilizers uptake, growth, *Lolium rigidum*, *Trifolium subterraneum* 9547.
 +*Rhizobium phaseoli*, symbiosis, nitrogen fixation, phosphorus uptake, *Phaseolus vulgaris* 1502.
 role, *Allium cepa* nutrient uptake, association, soil salinity 7804.
 stimulation heavy metals uptake, *Einharta calycina*, acid rain 7805.
 symbiosis *Allium cepa*, growth association 9549.
 symbiosis, *Sorghum vulgare*, light effects on 2331.
 symbiosis, *Vitis vinifera*, relationship, hyphae structure, biochemical characteristics 4183.
 vesicular-arbuscular mycorrhizas formation, *Chrysanthemum norifolium* buds development effects on 4197.
- vesicular-arbuscular mycorrhizas inoculation, effect on *Capsicum annuum* growth, yield 4227.
- Glonus geosporum**
 interaction, *Glycine max*, ozone, acid rain, effects on 8674.
- Glonus intraradices**
 interspecific relationships, competition, mycorrhizas, *Zea mays*, *Allium* 5894.
- Glonus intraradices**
 vesicular-arbuscular mycorrhizas, *Citrus jambhiri*, effects on water uptake 4135.
- Glonus monosporum**
 endomycorrhizas, colonization, growth, phosphorus nutrient availability effects on, *Malus pumila*, *Allium porrum*, *Tagetes patulus* 9543.
 endomycorrhizas, nutrient uptake, nutrient availability, phosphorus, *Malus pumila*, *Allium porrum*, *Tagetes patulus* 9544.
- Glonus monosporum**
 interaction, *Glonus tenuis*, symbiosis, vesicular-arbuscular mycorrhizas 6944.

Glomus monosporus, (continued)

role *Allium cepa* nutrient uptake, association, soil salinity 7804.

Glomus mossae

biomass, association, roots, *Vicia faba* 553.
endomycorrhizas, *Zea mays*, effects on minerals uptake 4190.
+ fertilization, effects on *Juniperus chinensis* var. *sargentii* 4134.
= Frankia, effects on nitrogen fixation, *Casuarina equisetifolia* 3215.
identification, use, enzyme-linked immunosorbent assay 7273.
infection monitoring, chitin, mannans, levels, *Allium cepa* 3170.
inoculation, effects on *Glycine max* nitrogen fixation 4184.
inoculation, *Trifolium repens* 2348.
interspecific relationships, competition, mycorrhizas, *Zea mays*, *Allium* 5894.
spores, *Vicia faba*, crop fields 3186.
symbiosis, *Hedysarum coronarium*, growth, Italy 6975.
symbiosis, *Lactuca sativa*, nitrate, phosphate, effects on 5903.
symbiosis, vesicular-arbuscular mycorrhizas, carbon uptake 1471.
symbiosis, *Zea mays*, nitrate soil amendment, foliar applications, effects on 4204.
+ *Trifolium repens*, effects on yield 2330.
vesicular-arbuscular mycorrhizas, growth levels, roots, stimulation growth, *Vigna subcylindrica* 9560.

Glomus tenuis

interaction, *Glomus monosporus*, symbiosis, vesicular-arbuscular mycorrhizas 6944.
symbiosis *Allium cepa*, growth association 9549.

Glossina pallidipes

biological control, pathogenicity, mortality, *Bacillus thuringiensis* 984.

 β -Glucan

Dictyophora indusiata, conformation, antifungal agents 5569.
Rhizobium melioli, characterization 9193.
Streptococcus, isolation, characterization 9190.

 β -1,2-Glucan

extracellular, *Rhizobium melioli*, isolation, characterization 6576.

 α -D-Glucan hydrolase

Trichoderma viride, purification 6538.

 α -D-Glucan hydrolase

Trichoderma viride, purification 6538.

 α -Glucan phosphorylase

mechanisms, *Escherichia coli* 1888.

1,3- β -Glucan synthase

purification, characterization, *Candida albicans* 66.

1,4- α -D-Glucan 6- α -D-glucosyltransferase

production, assays, *Aspergillus niger* 4657.

 β -1,3-Glucan-glucanohydrolase

effects on ethanol fermentation, *Bacillus macerans* 1993.

Glucase

lysis, microorganisms 1917.

 β -Glucanase

effects on ethanol fermentation, *Bacillus* 1993.
localization, *Claviceps purpurea* infected, *Sicula*, pathogenesis 3917.

1,3- β -Glucanase

fungi biosynthesis 1929.

1,4- β -Glucanase

fungi biosynthesis 1929.

Glucans

biosynthesis, *Schizophyllum commune* protoplasts 1955.
cell walls, yeasts, reviews 1953.
Dictyophora indusiata, antifungal activity, mice 7453.
extracellular, *Acremonium dosyri*, biosynthesis, characterization 5533.
production, role, *Streptococcus mutans* 1,3a-glucosyltransferase 4690.
production, *Streptococcus mutans*, stannous fluoride effects on 8771.

 β -Glucans

chemical modification, *Alcaligenes faecalis*, antitumor activity, mice 7448.

1,2- α -Glucans

Rhizobium, structure 6582.

Glucokinase

characterization, sugars metabolism, *Zymomonas mobilis* 105.
purification, characterization, *Streptococcus mutans* 6419.
purification, kinetics, *Streptococcus mutans* 2774.
Zymomonas mobilis, purification, characterization 959.

Glucanate dehydratase

purification, characterization, *Clostridium pasteurianum* 6431.

Glucanate 5-dehydrogenase

purification, characterization, *Gluconobacter oxydans* subsp. *suboxydans* 4626.

Gluconic acid

biosynthesis, *Gluconobacter oxydans* immobilized cells, glucose metabolism

kinetics 5467.

fermentation, *Gluconobacter oxydans*, in vitro 8213.

formation, fermentation, citric acid, *Aspergillus niger* 1842.

Glucosylmycin

inhibition pyrimidines biosynthesis, imidazole acetyltransferase, *Bacillus subtilis* 8014.

Glucosylbacter

antibiotic 315 biosynthesis, antibacterial activity 2570.
biosynthesis polyene antibiotics, screening 2571.

Glucosylbacter oxydans

+ *Chlorella pyrenoidosa*, immobilized cells, glycerol conversion dihydroxyacetone 2856.

gluconic acid fermentation, in vitro 8213.

growth, 2,4-dinitrophenol, effects on 6054.

immobilization methodology 8127.

Glucosylbacter oxydans subsp. Industrius

cytoplasmic membranes, D-fructose 5-dehydrogenase, purification, characterization 4605.

Glucosylbacter oxydans subsp. melanogenes

cytoplasmic membranes, ketoglucanate dehydrogenase, purification, characterization 4609.

Glucosylbacter oxydans subsp. oxydans

immobilized cells, glucose metabolism kinetics, gluconic acid biosynthesis 5467.

Glucosylbacter oxydans subsp. suboxydans

cytoplasmic membranes, L-iditol dehydrogenase, purification, characterization 4603.

endodeoxyribonuclease GsuI, purification, substrate specificity 4688.

glucanate 5-dehydrogenase purification, characterization 4625.

glucose dehydrogenase purification, characterization 4606.

Glucosylbacter suboxydans

alcohol dehydrogenase, purification, crystallization 3683.

Gluconobacter suboxydans, (continued)

glutamine synthase, purification, characterization 5526.

Gluconolactone

binding exo-1,4- α -D-glucosidase, *Rhizopus* 6484.

Glucoronide

sulfate, biosynthesis, association, aromatic compounds oxidation, Cunninghamella elegans 2391.

Glucose

assimilation, *Puccinia graminis* 2388.
association, β -D-glucosidase suppression, *Streptomyces venezuelae*, chloramphenicol biosynthesis 2560.

binding exo-1,4- α -D-glucosidase, *Rhizopus* 6484.

biosynthesis, cellulose fermentation, *Trichoderma reesei*, *Saccharomyces cerevisiae*, β -D-glucosidase, ethanol effects on 4705.

biosynthesis, starch fermentation, bacteria α -amylase use 4699.

Candida wickerhamii fermentation 7533.

concentrations effects on fermentation products, bacteria 4551.

conversion, *Zymomonas mobilis*, hydrocarbons production 4261.

2,4-D biodegradation association, microorganisms 9266.

effects on enzymes, *Klebsiella pneumoniae* 1938.

effects on, *Pellicularia filamentosa*, hydroxylation, steroids 6564.

effects on, *Zymomonas mobilis*, sucrose, hydrolysis 6654.

fermentation, analyzers, yeasts, methodology 4545.

fermentation, *Clostridium acetobutylicum*, acetic acid, butyric acid, effects on 4726.

fermentation, *Escherichia coli*, heat production association, measuring techniques 1052.

fermentation, *Saccharomyces cerevisiae* immobilized cells, ethanol biosynthesis 137.

fermentation, 2-keto-L-glulonate acid production, *Erwinia corynebacterium* 928.

fructose, geranic acid effects on equilibrium, *Arthrobacter xyloxe isomerase* immobilized enzyme use, feeds syrups production 4864.

Gramineae, effects on *Drechslera sorokiniana* infection 3938.

hydrogen, production, immobilized cells, *Clostridium butyricum* 1976.

induction *Kluyveromyces lactis* β -D-galactosidase biosynthesis 6556.

inhibition cellulose, *Clostridium thermocellum* 1886.

inhibition, levansucrase activity, *Zymomonas mobilis* 8270.

interaction, geranic acid, relationship, D-glucose isomerase, *Arthrobacter* 1936.

metabolism, calorimetry, measuring techniques, *Vibrio alginolyticus* 1772.

metabolism, *Clostridium* 2890.

metabolism, microorganisms, feeding patterns effects on 6247.

+ molasses, carbon sources, *Saccharomyces cerevisiae* production 3806.

nitrate, effects on, *Pachysolen tannophilus*, fermentation 7534.

oxidation, *Pseudomonas solanaceae*, *Penicillium*, tannins soil amendment effects on 593.

Penicillium funiculosum, recovery, cellulose hydrolysis 7335.

production, cellulase wastes conversion, bioreactors, *Trichoderma viride* enzymatic activity 9172.

production, cotton wastes, fungi cellulolytic enzymes 6653.

production, immobilized enzymes, α -amylase, exo-1,4- α -D-glucosidase, *Aspergillus awamori* var. *kawachi* 8305.

separation techniques, association, *Penicillium funiculosum* cellulase, recovery, use, poly(acrylate) gels 8313.

stimulation, *Streptomyces fradiae*, tylosin, production, batch culture 4425.

stimulation, 2,4-D biodegradation, bacteria, soil 7809.

substrates, concentration, relationship ethanol inhibition, *Saccharomyces cerevisiae*, *Saccharomyces bayanus* 2870.

transport, role phosphoenolpyruvate-glucose phosphotransferase, bacteria 6411.

uptake, *Arthrobacter saliphilus*, cytochalasin effects on 1553.

utilization, *Saccharomyces lipolytica*, association, citric acid biosynthesis 6396.

utilization, *Zymomonas mobilis* ultrastructure relationship, ethanol, carbon dioxide production 5567.

Vacuum, effects on mycorrhizas formation 6970.

Glucose dehydrogenase

phospholipids, Triton X-100 activation, reduction ubiquinone, cytoplasmic membranes, *Pseudomonas fluorescens* 955.

proteolysis, *Bacillus megaterium* 8273.

purification, characterization, cytoplasmic membranes, *Pseudomonas fluorescens* 4604.

purification, characterization, *Gluconobacter oxydans* subsp. *suboxydans* 4606.

isolation, mycelia, methodology, *Streptomyces albobrunneus* 18.

D-Glucose isomerase

Arthrobacter, relationship, glucose, fructose, interaction, geranic acid 1936.

Glucose metabolism

effects on *Streptomyces noursei*, nystatin biosynthesis 6176.

kinetics, *Gluconobacter oxydans* immobilized cells, gluconic acid biosynthesis 5467.

role, *Cephalosporium acremonium* penicillin N conversion, association, cephalosporin C 8002.

Glucose oxidase

Aspergillus niger, immobilized enzymes, heat inactivation 43.

use, food processing, *Aspergillus niger* 3860.

use, measuring techniques, *Basidiomycetes* β -D-glucosidase activity 8163.

Glucose-1-phosphate adenyltransferase

Rhodospirillum rubrum, purification, characterization 26.

Glucose-6-phosphate dehydrogenase

Leuconostoc mesenteroides, yeasts, kinetics, mathematical models 6489.

NADP⁺ recycling, *Escherichia coli*, immobilized cells 4672.

purification, characterization, *Bacillus subtilis* 4635.

purification, dye-ligand chromatography, *Leuconostoc mesenteroides* 4617.

Glucosephosphate isomerase

inactivation, potassium thiocyanate, potassium bromide, *Streptomyces phaeochromogenus* 6512.

B-D-Glucosidase

activity, thin-layer chromatography, bioassays, use, *Penicillium expansum* 7270.

 α -D-Glucosidase

Bacillus firmus, biosynthesis, activity 9168.

biosynthesis, *Bacillus licheniformis* membranes ribosomes 8295.

hydrolysis, carbohydrates, fungi, bacteria 7431.

 β -Glucosidase

activity, *Alcaligenes faecalis* immobilized cells 4565.

activity, stemphylium loti, detection, azo dyes 2713.

hydrolysis, cellobiose, salicin, *Trichoderma*, immobilized cells 3791.

β -Glucosidase, (continued)

localization, *Glauconia purpurea* infected, Sicale, pathogenesis 3917.
production, continuous culture, *Aspergillus phoenicis* 3672.

 β -D-Glucosidase,

activity, soil microorganisms 7812.
activity, *Streptomyces flavogriseus*, comparison, *Streptomyces*, strains 8290.
Basidiomycetes, activity, measuring techniques, use, glucose oxidase 8163.
biosynthesis, *Blaeskea inspora* fermentation, cellobiose media (culture) 104.
cellulose hydrolysis, *Chaetomium crispatum* 9151.
effects on glucose biosynthesis, cellulose fermentation, *Trichoderma reesei*,
Saccharomyces cerevisiae 4705.
immobilized enzymes, *Aspergillus niger* 48.
induction, *Aspergillus terreus* 7330.
levels, relationship, exo-cellobiohydrolase activity, cellulolytic
microorganisms, fungi, measuring techniques 2814.
Lycopodium esculentum, defense mechanisms, wilt, *Verticillium albo-atrum* 4077.
Penicillium funiculosum, immobilization, use, poly(vinyl alcohol) 8315.
Penicillium funiculosum, immobilized enzymes, characterization 4584.
production, *Scytalidium lignicola* 6527.
purification, characterization, *Aspergillus terreus* 937.
purification, characterization, *Dekkera intermedia* 5513.
spore germination, *Trichoderma reesei* 7331.
Scytalidium lignicola, purification, characterization 9156.
secretion, *Trichoderma aureoviride*, fermenters 5511.
suppression, association, glucose, *Streptomyces venezuelae*, chloramphenicol
biosynthesis 2560.
Talaromyces emersonii, biological properties 31.
Trichoderma koningii, purification, characterization 2787.
Trichoderma pseudokoningii, carboxymethylcellulose stimulation biosynthesis 7423.
Trichoderma reesei, purification, characterization 9146.

Glucosyl-4',4'-diapocrotene-4-oate,

biosynthesis pathways, *Pseudomonas rhodos* mutants 4568.

Glucosyltransferase,

multiple forms, isolation, characterization, *Streptococcus mutans* 7411.
Streptococcus mutans, production, continuous culture 972.

1,3- α -Glucosyltransferase,

Streptococcus mutans, detection, role, glucans production 4690.

Glucuronans,

cell walls, *Abidia cylindrospora*, *Mucor mucodo*, *Rhizopus nigricans*,
physicochemical properties 6578.

 β -D-Glucuronidase,

inhibitor, *Mycobacterium tuberculosis*, purification, characterization 8260.

Glume blotch,

Septoria nodorum, association *Stidlopius mosellana*, triticum 1187.
Septoria nodorum, disease resistance, plant breeding, *Triticum aestivum* 3123.
Septoria nodorum, latent infection, *Triticum aestivum* 6752.
Septoria nodorum, pathogenicity, *Triticum aestivum*, *Hordeum vulgare* 3021.
Septoria nodorum, symptoms, *Triticum aestivum* 3950.
Septoria nodorum, *Triticum aestivum*, disease control, crop rotation, seed
treatments 9466.

Glutamate decarboxylase,

γ -aminobutyric acid formation, mechanisms, stereospecificity, *Escherichia coli*
6563.

Escherichia coli, immobilized enzymes, preparation, characterization 1855.
purification, kinetics, *Escherichia coli* 5486.

Glutamate dehydrogenase (NADP⁺),

activity, *Cenococcum granifforme*, purification, nitrogen uptake 6464.
kinetics, ammonium, rubidium activation, *Neurospora crassa* 4620.

L-Glutamate oxidase,

purification, characterization, *Streptomyces violaceus* 7371.

Glutamate synthase,

role, ammonia assimilation, association, nitrogen fixation, *Leguminosae* 5939.

Glutamate synthase (NADPH),

chemical modification, phenylglyoxal, pyridoxal 5'-phosphate, binding NADP,
 α -ketoglutaric acid, *Escherichia coli* 5488.

Glutamic acid,

biosynthesis, *Corynebacterium glutamicum* immobilized cells 16.
biosynthesis, *Streptomyces* 6388.
fermentation, *Corynebacterium*, growth association, relationship, carbon dioxide
production 6381.
nitrogen sources, *Glucobacter suboxydans*, glutamine synthase characterization
5526.

production, *Arthrobacter globiformis*, nutrient requirements 4569.

crystallography, *Pseudomonas*, *Acinetobacter* 7399.

Glutaminease,

kinetics, substrate specificity, mechanisms, *Acinetobacter glutaminasificans*
6543.

Saccharomyces cerevisiae, kinetics 1867.

Glutamine synthase,

Glucobacter suboxydans, purification, characterization 5526.

Glutamine synthetase,

Chlorobium vibrioforme, adenylation 7319.
inactivation, benzyl viologen, *Azotobacter chroococcum* 1868.
isoenzymes, purification, characterization, *Rhizobium phaseoli* 6467.
kinetics, cations effects on, *Micrococcus glutamicus* 6511.
purification, physicochemical properties, *Methylococcus capsulatus* 6400.
radioactive labelling, *Rhodospseudomonas capsulata* 3693.
Rhizobium phaseoli, nitrogen fixation, nodules, *Phaseolus vulgaris* 6985.

 γ -Glutamylcysteine synthetase,

chemical modification effects on kinetics, *Proteus mirabilis* 944.
Proteus mirabilis, purification, characterization 1915.

 γ -Glutamylglutamic acid,

purification, *Lentinus edodes* 914.

 γ -Glutamylsuccinyl-L-histidine,

purification, *Lentinus edodes* 914.

Glutaraldehyde,

Bacillus subtilis spores resistance 5177.
disinfectants aerosols, airborne microorganisms 5346.
disinfection, endospores 5338.
disinfection, hospitals 9821.
sanitizers, sterility, medical equipment 5227.

based disinfectants evaluation, dialysis systems, antibacterial activity,
Mycobacterium 7207.

Glutathione,

derivatives, inhibition lactoyl-glutathione lyase, yeasts 84.
production, immobilized cells, *Escherichia coli* 118.

Glutathione oxidase,

purification, characterization, *Penicillium* 4621.

Glutathione peroxidase,

purification, characterization, *Mucor hiemalis* 8300.

Glutathione reductase (NAD(P)H),

active sites, N-terminus, amino acid sequence, homology mercuric reductase,
Pseudomonas aeruginosa 9175.

photosensitivity labelling, yeasts 6500.

Gluten,

wheat, storage conditions, biodegradation, microorganisms 2915.

Gluteraidehyde,

fixation, plant viruses inclusions, structure 4472.

 β -D-Glucanase,

purification, characterization, reviews 1877.

Glucans,

Ganoderma lucidum, isolation, purification, characterization 6580.

Glycoellin,

biosynthesis, glyphosate effects on, *Phytophthora megasperma* f.sp.glycinea
infection, Glycine max, disease resistance 501.

Glyceraldehyde-phosphate dehydrogenase,

arginine residues, 2,3-butanedione chemical modification, effects on
physicochemical properties, kinetics, *Saccharomyces cerevisiae* 7352.
immobilized enzymes, subunits association kinetics, yeasts 4693.
NAD⁺ binding, *Bacillus stearothermophilus* 6475.
purification, characterization, *Thermus thermophilus* 4640.
purification, characterization, yeasts 4639.
structure, X-ray crystallography, *Bacillus coagulans* 72.
substrate structure, *Saccharomyces cerevisiae*, binding antibodies, rabbits 7332.

Glycerate dehydrogenase,

purification, characterization, *Pseudomonas* 4641.

Glycerol,

assays, association, detection, biomass methodology, ground water sediments
microorganisms 4466.

biosynthesis, *Saccharomyces cerevisiae* immobilized cells 127.

biosynthesis, sugars fermentation, yeasts 7525.

conversion dihydroxyacetone, immobilized cells, *Chlorella*

pyrenoidosa-Gluconobacter oxydans 2856.

media, *Acetobacter acetigenum* cellulose biosynthesis 111.

stabilization subtilisin, *Bacillus subtilis* 5503.

Glycerol dehydratase,

kinetics, thermodynamics, *Klebsiella pneumoniae* 7387.

Glycerol dehydrogenase,

biosynthesis, *Cellulomonas* 107.

purification, characterization, *Cellulomonas* 77.

Glycerol kinase,

assays, *Streptomyces coelicolor* 7310.

purification, *Bacillus stearothermophilus* 8266.

Glycerol monooxypate,

antibacterial activity, *Escherichia coli* outer membranes, succinate dehydrogenase
4290.

+hexametaphosphate, antibacterial activity, outer membranes, *Escherichia coli*
4291.

Glycerophosphate acyltransferase,

purification, characterization, *Escherichia coli* 8229.
reconstitution, phospholipids vesicles, kinetics, N.M.R. 3703.

Glycerophosphate phosphatidyltransferase,

purification, characterization, *Escherichia coli* 8230.

Glycerophospholipid-cholesterol acyltransferase,

substrate specificity, *Aeromonas salmonicida* 1884.

Glycine,

association, enhancement, *Bacillus amyloliquefaciens*, α -amylase, production
8296.

food preservatives 271.

agglutins relationship, disease resistance, *Phytophthora megasperma* var.sojae
1371.

L-2-aminoxy-3-phenylpropionic acid, inhibition, phytoalexins, effects on,
disease resistance, *Phytophthora megasperma* f.sp.glycinea 3907.

anthracnose, *Colletotrichum truncatum*, effects on, yield 1137.

Arachis hypogaea, cowpea mottle virus transmission, *Bemisia tabaci* vectors 4946.

bean pod mottle virus, *Ceratoma trifurcata* vectors, detection, enzyme-linked
immunosorbent assay 3067.

bean pod mottle virus infection, seed-borne diseases, epidemiology 2984.

blight, *Pseudomonas glycinea*, identification, biochemical characteristics 2991.

blight, *Pseudomonas*, symptoms, relationship, coronatine biosynthesis 2990.

blight, *Sclerotinia minor*, *Sclerotinia sclerotiorum* 1132.

brown spot, *Septoria glycines*, temperature, dew, effects on, pathogenesis 2105.

Colletotrichum truncatum anthracnose, *Phomopsis stem blight*, herbicides
stimulation factors 5821.

cowpea mild mottle virus infection, symptoms, *Bemisia tabaci* transmission 1129.

cultivars, host range, *Rhizobium japonicum*, nodulation 7841.

cultivars, plant breeding, disease resistance, stem rot, *Phialophora gregata*
5040.

cultivars, susceptibility, infection, *Phytophthora megasperma* f.sp.glycinea 6739.

damping-off, relationship, *Pythium ultimum* inoculum density 348.

disease control, benomyl foliar applications, metham fumigation 5060.

disease control, *Phytophthora megasperma* f.sp.glycinea, seed treatments,
metaxyl, Dowco 444 8644.

disease resistance, *Sclerotinia sclerotiorum* infection 1359.

disease resistance, screening, wilt, *Fusarium oxysporum* infection 1372.

disease resistance, soybean mosaic virus, strains 6839.

disease resistance, stem rot, measuring techniques 6869.

diseases identification, computer applications, USA, Illinois 4942.

foliar application, fungicides 7749.

fungi infection, nitrogen fixation, nodulation, metham fumigation inhibition
3251.

fungi plant diseases, seed treatments, fungicides, reviews 4132.

fungicides seed treatments effects on 5844.

growth stage, effects on phylosphere distribution, *Actinomyces*, yeasts 6946.

Heterodera glycines infection, *Nematophthora gynophila* parasites incidence 2848.

hydroponics, factors affecting, *Phytophthora megasperma* var.sojae, infection 349.

hypocotyls, laccase, infection, *Phytophthora megasperma* f.sp.glycinea 3916.

infection, races, *Phytophthora megasperma* f.sp.glycinea 1145.

Glycine max. (continued)

inheritance, disease resistance, peanut mottle virus, soybean mosaic virus 9463.
interaction, Glomus geosporum, ozone, acid rain, effects on 8674.
isolation, characterization, cowpea mild mottle virus, Ivory Coast 2115.
leafspot, Anastomata camarographidis 297.
leafspot, Corynebacterium flaccumfaciens 9323.
leaves, agglutinins, disease resistance, Pseudomonas glycinea 3128.
leaves, peroxidase activity, downy mildew, Peronospora manshurica 346.
inveses, Phakopsora pachyrhizi rust, microscopy analysis 8543.
metalaxyl, Phytophthora megasperma f.sp.glycinea, root rot, stalk rot 1420.
nailan selection, disease resistance, Phytophthora megasperma 330.
nitrogen fixation 2363.
nitrogen fixation analysis, isotopes methodology 5131
nitrogen fixation, association ureides 2365.
nitrogen fixation, Glomus mosseae inoculation effects on 4184.
nitrogen fixation interaction carbon dioxide fixation 4236.
nitrogen fixation measuring techniques, field trials 5961.
nitrogen fixation, nitrogen-15, measuring techniques, field trials 9611.
nitrogen fixation, nodules respiration, water stress effects on 1499.
nitrogen fixation relationship photosynthesis, seeds yield 6984.
nitrogen fixation, Rhizobium japonicum, carbon dioxide enrichment effects on 4248.
nitrogen nutrient uptake, inhibition nitrogen fixation 8865.
nitrogen fixing bacteria, factors affecting phyllosphere distribution 5957.
nitrogen-15 distribution, bacteroids, nodules, Rhizobium, nitrogen fixation 9615.
nodulation, association, Rhizobium intraspecific relationships 9605.
nodulation, biomass, soil compaction, precipitation effects on 6999.
nodulation, nitrogen assimilation association 606.
nodulation, Rhizobium japonicum characterization, sodium chloride tolerance 6976.
nodulation, Rhizobium japonicum, role capsules polysaccharides 3237.
nodules, enzymes effects on nitrogen fixation, Rhizobium japonicum 8694.
nodules, nitrification, nitrate effects on 8693.
nodules, Rhizobium japonicum antibiotic resistance isolates 651.
nodules, Rhizobium japonicum, hydrogen metabolism 6979.
nodules, Rhizobium japonicum, hydrogen uptake effects on nitrogen fixation 7009.
nodules, Rhizobium japonicum, nitrogenase activity, protein biosynthesis 7010.
nodules, Rhizobium japonicum nitrogenase, nitrite, nitric oxide, effects on 1501.
Phakopsora pachyrhizi rust disease resistance, inheritance, genetic analysis 6858.
photosynthesis, carbon sources, energy budget, utilization, Rhizobium, nitrogen fixation 9603.
phytoalexin, yield, nitrogen fixation, Rhizobium japonicum mutants 9579.
phytoalexins accumulation association Pseudomonas syringae, N-phosphonomethyl glycine effects on 498.
Phytophthora megasperma f.sp.glycinea, infection, disease resistance, phenotype mixing 1373.
Phytophthora megasperma f.sp.glycinea infection, disease resistance, glyphosate effects on glycoallin biosynthesis 501.
Phytophthora megasperma f.sp.glycinea infection, disease resistance, host-pathogen interactions 8615.
Phytophthora megasperma f.sp.glycinea infection, epidemiology, Australia 4336.
Phytophthora megasperma f.sp.glycinea, pathogenicity, temperature effects on 396.
plant breeding, disease resistance, stem rot, Phialophora gregata 9457.
plant breeding, disease tolerance, Phytophthora root rot, USA, Ohio 7656.
plant diseases, surveys 7659.
powdery mildew, Microspheara diffusa, USA, Delaware 4934.
Pseudomonas syringae, enhancement, corymyrin 2264.
Rhizobium japonicum effects on yield, Canada 7861.
Rhizobium japonicum infection, roots nodules ultrastructure 3928.
Rhizobium japonicum infectivity, cell culture age effects on 2112.
Rhizobium japonicum nodulation effects on pathogenicity, root rot, Phytophthora megasperma f.sp.glycinea 5669.
Rhizobium japonicum nodulation, nitrogen fixation assays, methodology 8690.
Rhizobium japonicum nodulation, nitrogen fixation efficiency 7833.
Rhizobium japonicum symbiosis, Glycine max 8700.
Rhizobium japonicum symbiosis, host specificity 2369.
Rhizobium japonicum symbiosis, salinity effects on nitrogen fixation 7830.
Rhizobium nitrogen fixation measurement 5129.
Rhizobium nitrogen fixation, nitrogen fertilizers effects on 5105.
Rhizobium, nodulation 3230.
Rhizobium strains, inoculation, nitrogen fixation, host range 8679.
Rhizoctonia solani, disease control, insecticides 8625.
root rot, Cylindrocladium rotariae, pathology, Meloidogyne incognita, growth regulators, effects on 3909.
root rot, disease control, fungicides seed treatments, USA, Ohio 7772.
root rot, Phytophthora megasperma f.sp.glycinea 1135.
root rot, Phytophthora megasperma f.sp.glycinea, treatment, metalaxyl+phytoalexins 503.
root rot, races, Phytophthora megasperma f.sp.glycinea 5674.
roots exudates, nitrogenase activity, Rhizobium japonicum 3225.
roots, pathogenesis, Phytophthora megasperma f.sp.glycinea, zoospores 4935.
roots volume, soybean mosaic virus infection effects on 328.
root, Phytophthora megasperma var.sojae 3920.
rice gene, role, disease resistance, Phytophthora megasperma f.sp.glycinea, infection 2252.
Sclerotinia sclerotiorum ascospores infection, symptoms 9334.
seasonal variations, cultivars, effects on nitrogen fixation 9581.
seed treatments, fungicides, disease control 1428.
seed-borne diseases, fungicides disease control 1434.
seed-borne diseases, soybean mosaic virus, radioimmunoassay 1316.
seeds, detection soybean mosaic virus, solid phase methods, radioimmunoassay 5368.
seeds, fungi, mycelia, penetration, pores 321.
seeds germination, Cercospora kikuchi effects on 4939.
seeds microflora, Azotobacter = foliar applications effects on 5671.
seeds, Phomopsis infection, relationship, weather, USA, Kentucky 6734.
seeds, soybean mosaic virus infection, detection, enzyme-linked immunosorbent assay 343.
seeds stain, Cercospora kikuchi, new records, Pakistan 7662.
seeds, symptoms, relationship, seed-borne diseases, Diaporthe phaseolorum var.sojae 1143.
Setaria glycines brown spot, lesions, relationship seeds color 5684.
soil microorganisms association, propagation 7862.
soil moisture, Glycine max, irrigation, Rhizobium japonicum, nitrogen fixation 6993.

Glycine max. (continued)

soybean crinkle leaf virus infection, disease transmission vectors, Bemisia tabaci 5672.
soybean mosaic virus, effects on, nitrogen balance, nitrogen fixation 8533.
soybean mosaic virus, enhancement, bean pod mottle virus, infection 8541.
soybean mosaic virus infection, cytology 4929.
soybean mosaic virus infection, disease resistance 7733.
stem canker, Diaporthe phaseolorum var.caulivora, epidemics 9327.
stem canker, Diaporthe, Phomopsis, virulence 9325.
stems, Macrophomina phaseolina saprophy, herbicides effects on 2380.
symbiosis, Rhizobium japonicum, Heterodera glycines, genetic analysis 6998.
symbiosis Rhizobium japonicum, nodulation, photosynthesis, nitrogen cycle 8701.
symbiosis, Rhizobium japonicum, roots temperature effects on 6940.
tissue culture, Agrobacterium tumefaciens binding, crown gall 2977.
USA, Phialophora gregata isolates, pathogenicity 4932.
Verticillium nigrescens incidence 931.
vascular-arterbular mycorrhizas, soil temperature effects on 2332.
virulence, Phytophthora megasperma f.sp.glycinea races, USA, Wisconsin 1130.
web blight, Rhizoctonia solani, benomyl disease control 5059.
yield, brown spot, Septoria glycines, effects on 5678.
yield, competition, comparison soybean mosaic virus infection, non-infected 6740.
yield, nodulation, Rhizobium japonicum 9580.
yield, nodulation, Rhizobium, soil amendment effects on 9582.
yield, Rhizobium japonicum nitrogen fixation effects on 7000.
Glycogen, assays, Saccharomyces cerevisiae 4547.
Glycoals, industrial pollution, biodegradation, measuring techniques 5577.
Glycoproteins, accumulation, ethylene effects on cell walls, Colletotrichum lagenarium infection, Cucumis melo 3981.
analogs, rabies virus, gene expression, Escherichia coli 8046.
antibiotic A35512B, structure, N.M.R. Streptomyces candidus 8027.
biosynthesis, tunicamycin, effects on, herpes simplex virus 1 4312.
(E)-5-(2-bromovinyl)-2'-deoxyuridine, inhibition, herpesvirus (bovine) 1, glycosylation 8679.
defense mechanisms, Nicotiana glauca, viruses infection, poly(I) poly(C)+cyclic AMP+cyclic GMP, activation 3136.
envelopes, infectious anemia virus, isolation, lectins affinity chromatography 8097.
Epstein-Barr virus, purification, cell culture 9105.
high-molecular weight, Candida guilliermondii cell walls, hydrocarbons effects on 7868.
Lassa fever virus, Japanese encephalitis virus, detection, concanavalin A, methodology 3541.
Nicotiana tabacum, purification, callus culture, agglutination, Phytophthora parasitica, Pseudomonas solanacearum 1351.
oligosaccharides, structure, Vesicular stomatitis virus, swainsonine, effects on 4314.
Phytolacca americana, antiviral activity, tobacco mosaic virus 2491.
Rauscher leukemia virus, antigenic determinants, molecular weight, monoclonal antibodies, precipitation, methodology 1748.
role, morphogenesis, infectivity, rotavirus (simian) SA11, tunicamycin, effects on 4313.
rotavirus (human), purification, characterization, cell culture 7300.
Glycosaminophosphate isomerase (glutamine-forming), purification, characterization, Proteus mirabilis 7373.
Glycosidases, biosynthesis, psychrotrophic bacteria 5516.
Glycosides, buds, disease resistance markers, Ustilago scitaminea smut, Saccharum officinale 9359.
Glycosylation, erythronolide A, biosynthesis erythromycin A, Streptomyces erythraeus 6168.
glycoproteins, (E)-5-(2-bromovinyl)-2'-deoxyuridine, inhibition, herpesvirus (bovine) 1 6079.
Glycoline, antibacterial activity, antifungal activity, Escherichia coli, Staphylococcus aureus, Candida albicans, Aspergillus niger 7961.
Glyphosate, effects on glycoallin biosynthesis, Phytophthora megasperma f.sp.glycinea infection, Glycine max, disease resistance 501.
resistant, Agrobacter aerogenes cell culture, Corydalis sempervirens tissue culture 8743.
stimulation fruits, Colletotrichum truncatum, Phomopsis, anthracnose, stem blight, Glycine max 5621.
effects on spores quantity, Rhynchosporium secalis infection, Hordeum 486.
Gnomonia errabunda, infection, association Phyllaphis fagi outbreaks, Fagus 3166.
Gnomonia leptoystia, anthracnose, genetic analysis, selection, disease resistance, Juglans nigra 5874.
Gnomonia plantani, bark necrosis, Piantanus 6920.
Goats, antibodies, visna virus, maedi virus, detection, enzyme-linked immunosorbent assay 2651.
carcasses, chlorine washing 6684.
isolation, Staphylococcus, antibiotic resistance 8744.
meat, frozen foods, contamination, Bacillus cereus, Staphylococcus aureus, Streptococcus 5606.
milk, fermentation, starter cultures 9268.
Gold, biogeochemistry, bacteria, actinomycetes, fungi 7013.
+protein A, cating, viruses antigens localization 1750.
Gomphrena globosa, cactus virus X isolates characterization 5019.
Cybidium ringspot virus cytopathology 4018.
Cybidium ringspot virus cytopathology 4035.
cytopathology, tomato bushy stunt virus 4034.

Gomphrena globosa, (continued)

Datura metel plant extracts foliar application, antiviral activity, gomphrena virus 7771.
leaves, disease resistance, tomato bushy stunt virus 1378.
olive latent ringspot virus infection, ultrastructure 5780.
viruses infection, leaves, hypersensitive response 2156.

Gomphrena virus,

antiviral activity, *Datura metel* plant extracts, foliar application, Gomphrena virus 7771.

Gonorrhea,

diagnosis, Limulus lysate test, man 1776.
diagnosis, use enzyme-linked immunosorbent assay 1796.

Goodyera repens,

roots, symbiosis, *Rhizoctonia goodyerae-repentis*, mycorrhizas 4201.

Gopiana,

host range, rust, *Discorea* 4013.

Gopiana australis sp. nov.

taxonomy, rust, host range, *Discorea* 4013.

Gossypium,

defoliation relationship, *Verticillium dahliae* inoculum quantitation 9390.
disease resistance, wilt, *Verticillium dahliae*, *Fusarium oxysporum* f.sp. *vasinfectum* 4066.

Rhizoctonia solani infection, antifungal activity, carboxin 4122.

seed treatments, fungicides, damping-off, seed rot 1432.

seedlings, diseases, bacteria, fungi, disease control 2225.

Verticillium dahliae, association melanins deficient mutant, complementation genetic analysis, gene mapping, *Verticillium dahliae* 6796.

Gossypium barbadense,

cotyledons, susceptibility, *Alternaria macrospora*, infection, pathogenesis 9391.

wilt, *Fusarium oxysporum* f.sp. *vasinfectum*, dispersal, Israel 6817.

yield, wilt, *Fusarium oxysporum* f.sp. *vasinfectum*, solar radiation, soil temperature, effects on 8606.

Gossypium hirsutum,

cotyledons, membrane potential, relationship, ATP, blight, *Xanthomonas campestris* pv. *malvacearum* 3055.

crop residues, digestibility, sheep, rumen microorganisms, pretreatment, ozone, sodium hydroxide 5633.

crop residues, digestibility, sheep, rumen microorganisms, pretreatment, ozone, sodium hydroxide 5634.

disease resistance, genetic analysis, blight, *Xanthomonas malvacearum* 2254.

Fusarium oxysporum f.sp. *vasinfectum* wilt, side-effects, herbicides 3145.

Fusarium oxysporum f.sp. *vasinfectum* wilt+*Meloidogyne incognita* acrota infection, disease resistance 7732.

hypersensitive response, blight, *Xanthomonas campestris* pv. *malvacearum* 3129.

phytoalexins, antibacterial activity, *Xanthomonas campestris* 460.

radicle, chilling, exudates, relationship, susceptibility, *Verticillium wilt*, *Rhizoctonia*+root rot 4030.

rhizoplane, *Azotobacter chroococcum* growth 3195.

roots, crown gall, *Agrobacterium radiobacter* var. *tumefaciens* 1307.

roots exudates, stimulation spore germination, *Fusarium oxysporum* f.sp. *vasinfectum* 8706.

seedlings, footrot, *Fusarium solani*, new records, India 7695.

seedlings, soil-borne diseases, Pythium 1266.

seeds, ammoniation, effects on cow's milk alfalfa M1, cattle feeding regimes 2545.

seeds, *Fusarium oxysporum* f.sp. *vasinfectum* wilt, pathogenesis 4991.

seeds germination, *Azotobacter chroococcum* stimulation 3194.

seeds, protection, fungi infection 5068.

soil-borne diseases, biological control, shellfish wastes soil amendment stimulation chitinolytic bacteria 7779.

Verticillium dahliae infection, *Tritychius reniformis* effects on disease resistance 8612.

virus-like particles, disease transmission, *Bemisia tabaci* 2199.

wilt, phymatotrichum omnivorum, effects on, roots, water flow 4039.

Xanthomonas campestris infection, leaves ultrastructure 417.

Xanthomonas campestris infection, leaves ultrastructure 418.

yield, wilt, *Fusarium oxysporum* f.sp. *vasinfectum*, solar radiation, soil temperature, effects on 8606.

Gougerotia,

Streptomyces, plants growth inhibitors, characterization 8383.

Grain,

Citritin detection, chromatography 7589.

detoxification, ammonia, ochratoxin A 2063.

dust, fungal flora, mycotoxins, grain elevators 7619.

Hordeum vulgare, *Triticum aestivum*, cytokinins levels, relationship, disease resistance, mildew, *Erysiphe graminis* 2249.

quality, association, fungicides treatment, *Triticum aestivum* rust 7667.

stored products, fungi, degradation, malathion, *Aspergillus glaucus* 7557.

Tilletia controversa spores contamination, *Triticum aestivum* 1329.

use, alcohols fermentation, association, noncooking methodology 1045.

molds, nutritive value, chickens 3852.

substrates, *Fusarium graminearum*, mycotoxins biosynthesis 8511.

Gram,

contamination, aflatoxin B1 7616.

Gram negative bacilli,

antibacterial activity, cefprozime 2528.

Gram stain,

feces, *Clostridium difficile*, colitis, diagnosis methodology 9940.

reaction, potassium hydroxide, vancomycin, methodology, identification, gram-negative bacilli, gram-positive bacilli 9972.

use, detection, microorganisms, children blood culture 8140.

Gram-negative bacilli,

antibacterial activity 2541.

antibacterial activity, β -lactam antibiotics 7983.

antibacterial activity, cefamandole, aztreonam, 7185.

antibacterial activity, cefoperazone+ mezlocillin 6146.

antibacterial activity, cefprozime, antibiotic synergism, aminoglycoside antibiotics 2531.

antibacterial activity, ciprofloxacin 9661.

antibacterial activity, macrolide antibiotics 8041.

antibacterial activity, N-formimidoyl thienamycin, +amikacin 1660.

antibiotic sensitivity testing, cephalosporins 2449.

antibiotic sensitivity testing methodology comparison 6090.

antibiotic sensitivity testing, penicillins 8001.

bacteriuria isolates, man, norfloxacin antibacterial activity 7073.

Gram-negative bacilli, (continued)

cephalosporins antibacterial activity 8837.

clinical isolates, aminoglycoside antibiotics antibiotic resistance 8726.

drug resistance, relationship hospitals 8737.

gentamicin resistance, antibiotic sensitivity testing, β -lactam antibiotics 4342.

identification, methodology 3586.

identification, potassium hydroxide, vancomycin, Gram stain reaction, methodology 9972.

infection, cotrimoxazole intravenous administration, in vitro antibacterial activity, man 6037.

β -lactam antibiotics+antineoplastic drugs synergism, antibacterial activity 3385.

primidic acid antibacterial activity 1556.

trimethoprim drug resistance, epidemiology, genetic analysis 6001.

Gram-negative bacteria,

airborne microorganisms, poultry processing, association, chickens feces 1727.

antibacterial activity, β -lactam antibiotics, cephalosporins 6119.

antibacterial activity, aminodisaccharides 8751.

antibacterial activity, aztreonam 6203.

antibacterial activity, aztreonam 8881.

antibacterial activity, aztreonam comparison 8816.

antibacterial activity, cefmenoxime, comparison, cephalosporins 6137.

antibacterial activity, cefotetan 2526.

antibacterial activity, cefotetan 4350.

antibacterial activity, cephalosporins 1606.

antibacterial activity, cephalosporins 4362.

antibacterial activity, cephalosporins, synthesis 8842.

antibacterial activity, cefprozime, cefuroxime, cefamandole, cefazoline, cefaclor, cefixime 883.

antibacterial activity, dimethyl sulfoxide: antibiotic agents 7919.

antibacterial activity, moxalactam 5269.

antibacterial activity, norfloxacin 2432.

antibacterial activity, Oidiodendron truncatum antibiotic PR-1350 9773.

antibacterial activity, phosphorus containing, nitrogen containing, cations complex 7921.

antibacterial activity, piperacillin 9757.

antibacterial activity, *Saccharopolyspora saccharocin* 8886.

antibacterial activity, temocillin, ampicillin 2552.

antibacterial activity, thiosemicarbazide salts, triphenyl-phosphonic anhydride 7923.

antibacterial activity, undecyleneamide, caprylanide, derivatives 9665.

antibacterial activity, 2-(2-aminothiazol-4-yl)-2-sulfoacetyl cephalosporins 7991.

antibacterial activity, 3,6-dihydroxyindoxazole 6218.

antibiotic antagonism, piperacillin+cefoperazone 3387.

antibiotic resistance, septicemia, man 645.

antibiotic sensitivity testing 9726.

antibiotic sensitivity testing methodology 9039.

antibiotic sensitivity testing, use, laser's nephelometry automated methods 9737.

antibiotic synergism, mecillinam+ampicillin, antibacterial activity 9758.

antimicrobial activity, biquaternary ammonium compounds 703.

antimicrobial activity, roots extracts, *Agromonia pilosa* 8800.

argemargin drug sensitivity testing, association, media factor analysis 2697.

aztreonam, antibacterial activity 7124.

biochemical characteristics, identification 4506.

biodegradation, phenylureas, acid anilides 2898.

cefotetan antibacterial activity 5198.

cefotetan antibacterial activity, role penicillin-binding protein binding 4373.

cell walls, sanguiniferin effects on 8873.

cephalexin+flucloxacillin antibacterial activity, infection treatment, man 6132.

cephalosporins antibacterial activity 4347.

cephalosporins antibacterial activity, side effects, cost-benefit analysis, reviews 7143.

clinical isolates, amikacin antibiotic resistance 4281.

clinical isolates, drugs sensitivity, osteomyelitis, man 6057.

contamination, cream, pasteurization 8496.

cotton contamination, endotoxins effects on respiratory function, man 1320.

differentiation, association, lipopolysaccharides pyrolysis, gas chromatography 4490.

dust, pigs housing 7638.

endotoxins, contamination, cotton 5659.

endotoxins, cottonseed dust 5663.

endotoxins, localization, cotton 4913.

enterotoxins, in vitro, characterization 304.

enumeration methodology, cosmetics 2679.

food contamination, milk, Limulus lysate test use detection food quality 8484.

gramicidin S, analogs, peptide synthesis, structure-activity relationships, antibacterial activity 9786.

growth, luncheon meat, vacuum packaging, factors affecting 4878.

Holothuridae terpene glycosides antimicrobial activity 2494.

isolates, antibacterial activity, antibiotic synergism, ceftizoxime, gentamicin 2539.

istamyacin B derivatives, antibacterial activity 7055.

β -lactamase, antibacterial activity, cloxacillin+ampicillin, cloxacillin+cephalosporins 1610.

β -lactamase, assays 5506.

β -lactamase, hydrolysis, cefotetan stability 4366.

β -lactamase, suicide inhibitors 2810.

lactic acid biosynthesis 8206.

leaf scorch, pathogenicity, *Platanus occidentalis* 9515.

levels, waste disposal sites, composts 5292.

metals tolerance, association, soil pollution 6980.

L-methionine γ -lyase production, culture systems 5389.

mezlocillin, comparison, penicillins, antibacterial activity 6141.

mezlocillin+penicillins antibacterial activity synergism 7058.

microwave radiation sterilization, culture systems plastics 708.

Myxococcus fulvus myxovargin antibacterial activity 4412.

norfloxacin antibacterial activity 2453.

norfloxacin antibacterial activity 7057.

novobiocin antibacterial activity, pH effects on 6228.

Pierce's disease, pathology, *Vitis vinifera* 3058.

plasmids, antibiotic resistance, trimethoprim, isolation, characterization 7872.

scald, *Prunus salicina*, isolation, pathogenicity, culture 1153.

semisynthetic penicillins, antibacterial activity 746.

Gram-negative bacteria, (continued)

- serum bactericidal activity, reviews 4295.
- temocillin antibacterial activity 2550.
- thienzopyrimidine antibacterial activity, structure-activity relationships 6036
- 1,2,3-triazolones antibacterial activity 4293.
- urinary tract infection, cinoxacin treatment, man, antibacterial activity, reviews 8762.
- use, drug sensitivity testing, antimicrobial agents efficacy 9702.

Gram-negative cocci,

- D-ribose reductase, purification, characterization 4631.
- fermentation, identification, methodology 2707.

Gram-positive bacilli,

- identification, potassium hydroxide, vancomycin, Gram stain reaction, methodology 9972.

Gram-positive bacteria,

- Actinomadura antibiotics, antagonism 1487.
- antibacterial activity, antibiotic M-92 3428.
- antibacterial activity, antibiotic MF722-02 3422.
- antibacterial activity, antibiotic OM-7453 7179.
- antibacterial activity, antibiotic OM-704 3432.
- antibacterial activity, antibiotic SQ 26.917 8039.
- antibacterial activity, antibiotics, biosynthesis, *Streptomyces tendae* 8878.
- antibacterial activity, aztreonam 8881.
- antibacterial activity, cefalotin 4364.
- antibacterial activity comparison, cefuroxime, cefamandole, cefazoline, cefaloridine, cefalexine 8831.
- antibacterial activity, mezlocillin, comparison, penicillins 6141.
- antibacterial activity, moxalactam 5276.
- antibacterial activity, norfloxacin 2432.
- antibacterial activity, Oxidodendron truncatum antibiotic PR-1350 9773.
- antibacterial activity, phosphorus containing, nitrogen containing, cations complex 7921.
- antibacterial activity, Saccharopolyspora saccharocin 8886.
- antibacterial activity, Sarulubin B, streptomycetes biosynthesis 3440.
- antibacterial activity, streptomycetes rhinensins 1672.
- antibacterial activity, teichomycin 3437.
- antibacterial activity, thiosemicarbazide salts, triphenyl-phosphonic arylhydrazones 7923.
- antibacterial activity, undecylenanilide, caprylanilide, derivatives 9665.
- antibacterial activity, ceftriaxone, disc-diffusion test 7998.
- antibiotic resistance, haemolysins derivatives effects on 3269.
- antibiotic sensitivity testing, teichomycin, vancomycin 8202.
- antimicrobial activity, biquaternary ammonium compounds 703.
- antimicrobial activity, pectinatone 6910.
- antimicrobial activity roots extracts, *Agrimonia pilosa* 8800.
- aztreonam, antibacterial activity 7124.
- cellulose antibacterial activity, role penicillin-binding protein binding 4373.
- cell walls, sanguinidin effects on 8873.
- cephalosporins antibacterial activity 8837.
- cephalosporins antibacterial activity, side effects, cost-benefit analysis, reviews 7143.
- dechlorinacin antibacterial activity 6220.
- hexahydrododeca triterpene glycosides antimicrobial activity 2494.
- islaunicin B derivatives, antibacterial activity 7055.
- β -lactamase, assays 5506.
- lactic acid biosynthesis 8206.
- lipoteichoic acid isolation methodology 9035.
- mezlocillin, antibacterial activity 6143.
- microwave radiation sterilization, culture systems plastics 708.
- Mycoccus fulvus* myxovirginal antibacterial activity 4412.
- norfloxacin antibacterial activity 7057.
- ravidomycin, antibacterial activity 6210.
- ristocetin- α -glycone antibacterial activity 3429.
- tetracaracin antibacterial activity 1671.
- thienzopyrimidine antibacterial activity, structure-activity relationships 6036.
- 1,2,3-triazolones antibacterial activity 4293.
- tylosin effects on macrolide antibiotics resistance, pigs isolates 5156.

Gram-positive cocci,

- antibacterial activity, cefmetazole 2541.
- antibacterial activity, ciprofloxacin 9661.
- antibacterial activity, nalidixic acid, ciprofloxacin, norfloxacin, pimepide acid 7924.
- antibacterial activity, piperacillin 9757.
- antibacterial activity, ceftriaxone, disc-diffusion test 7998.
- clinical isolates, antibacterial activity, cefoxitin, tobramycin, comparison N-formimidoyl thienamycin 7076.

Gramicidin,

- biosynthesis, *Bacillus brevis*, formic acid, ethanolamine, production 774.

Gramicidin S,

- analogs, peptide synthesis, structure-activity relationships 5264.

Gramicidin S,

- analogs, peptide synthesis, structure-activity relationships, antibacteria activity, gram-negative bacteria 9786.

Gramicidin S,

- antibacterial activity, *Bacillus brevis*, *Bacillus subtilis* 2424.

Gramicidin S,

- Bacillus brevis*, biosynthesis, association, oxygen content, media 6225.

Gramicidin S,

- Bacillus brevis*, biosynthesis, media oxygen content effects on 6226.

Gramicidin S,

- biosynthesis, *Bacillus brevis*, storage + freeze drying effects on 9783.

Gramicidin S,

- deficient mutant, *Bacillus brevis*, phenylalanine metabolism transfer, gramicidin S synthesis 8407.

Gramicidin S,

- lytic, *Bacillus megaterium*, *Micrococcus lysodeikticus*, protoplasts 2577.

Gramicidin S,

- synthesis 8407.

Gramicidin S,

- synthesis 8407.

Gramicidin S,

- synthesis 8407.

Gramicidin S,

- synthesis 8407.

Gramicidin S,

- synthesis 8407.

Gramicidin S,

- synthesis 8407.

Gramicidin S,

- synthesis 8407.

Gramicidin S,

- synthesis 8407.

Gramicidin S,

- synthesis 8407.

Gramicidin S,

- synthesis 8407.

Gramicidin S,

- synthesis 8407.

Gramicidin S,

- synthesis 8407.

Gramineae, (continued)

- Drechslera sorokiniana infection, glucose effects on 3938.
- ergot, epidemiology 1151.
- food contamination, 4-deoxynivalenol 6687.
- footrot pathogens antagonism, *Pseudocercospora herpotrichoides*, *Fusarium*, *Rhizoctonia cerealis* 1148.
- fungi plant diseases, seed treatments, fungicides, reviews 4132.
- host range, barley yellow dwarf virus 1155.
- host range, downy mildew, *Peronosclerospora sorghi* 5700.
- host range, maize chlorotic mottle virus 4949.
- host range, *Peronosclerospora philippinensis*, companion, *Peronosclerospora sacchari* 6753.
- infection, *Athelia fuiciformis*, *Laetisaria fuiciformis*, *Corticium fuiciforme*, pathogenesis 3933.
- infection, *Laetisaria fuiciformis*, *Limonoxyces*, symptoms 3014.
- leaf rust, *Puccinia*, disease resistance history 2264.
- Leguminosae, Rhizobium infection, effects on 2113.
- maize dwarf mosaic virus, plant viruses vectors, *Schizaphis graminum*, disease transmission 5704.
- maize streak virus, host range 6778.
- mixed culture, *Arachis hypogaea*, nodulation, nitrogen fixation 4250.
- mixtures, incidence, endomycorrhizas, rhizoplane microorganisms 569.
- mycotoxins contamination 5651.
- nitrogen-fixing bacteria activity, acetylene reduction 1497.
- nitrogen-fixing bacteria, rhizosphere 9600.
- pathogenesis, relationship *Fusarium culmorum*, zeaxenone biosynthesis 8510.
- peracetic acid, antifungal activity, foot rot, pathogens 1394.
- phytopathogenic fungi infection, *Gaeumannomyces graminis* suppression, soil, effects on 3207.
- plant breeding, disease resistance, fungi 2241.
- plant diseases, fungi, disease control 5829.
- post-harvest decay, food contamination, fungi 2236.
- Puccinia* rust, reproduction, genetic variance 1160.
- pythium infection, fungicides treatment 4114.
- rhabdovirus infection 2118.
- rhizosphere, phosphate-dissolving bacteria 2333.
- rice yellow mottle virus host range 8555.
- rust, disease spread, models 366.
- rust, disease spread, monitoring, weather satellites 1166.
- rust, *Puccinia graminis* subsp. *graminicola*, evolutionary genetics, ecology 3004.
- senescence, *Erysiphe graminis* powdery mildew, shading, effects on 3956.
- senescence, *Entyloma dactyloides*, *Entyloma brizae* 2129.
- susceptibility, infection, maize dwarf mosaic virus, sugarcane mosaic virus, USA, Mississippi 8559.
- symbiosis, vesicular-arbuscular mycorrhizas, colonization 5902.
- turfgrass, blight, *Pythium*, pathology 5714.
- viruses spot, symptoms, vectors, biological properties 1163.
- wilt dwarf virus infection 2120.
- wilt, bacteria infection, host specificity 359.
- Xanthomonas campestris infection, distribution, Belgium 362.
- wilt, *Fusarium* infection effects on 7675.

Graminella nigrifrons,

- vectors, maize chlorotic dwarf virus, maize dwarf mosaic virus, pesticide applications, soil, cardotum 7738.
- viruses, maize dwarf mosaic virus transmission, *Sorghum halepense*, *Zea mays* 4971.
- vectors, sex differences, maize chlorotic dwarf virus stunt, *Zea mays* 5697.

Granada medium,

- use, identification, *Streptococcus* group B 9976.

Granules,

- Fagus mycorrhizas*, phosphorus levels, calcium levels 6973.

Grasses,

- Agrostis segetum*, production methodology, biological control 8359.
- biological control, *Arthropoda*, *Malus* 8355.
- biological control, *Cydia pomonella* 8356.
- biological control, *Cydia pomonella*, association, nuclear polyhedrosis virus 8354.
- biological control, *Cydia pomonella*, field trials 8357.
- biological control, *Cydia pomonella*, fruit trees 8353.
- biological control, *Insecta*, control programs 9212.
- biological control, *Pieris rapae*, *Brassica oleracea*, crop fields 6596.
- biological control, production, mass rearing, larvae, *Agrostis segetum* 9211.
- infection, *Heliothis armigera confertus*, rearing methodology 1738.

Grapefruit,

- Phomopsis citri* post-harvest decay, fungicides disease control, USA, Texas 4049.

Grapes,

- Botrytis cinerea* post-harvest decay, sulfur dioxide fumigation, packaging, temperature effects on 2905.

Grapes,

- microflora, *Saccharomyces cerevisiae* 3758.

Grapevine,

- Bulgaria latens* virus, infection, *Vitis vinifera*, symptoms, electron microscopy 3080.

Grapevine,

- infection, *Vitis vinifera*, symptoms, electron microscopy 3080.

Grapevine,

- infection, *Vitis vinifera*, detection, enzyme-linked immunosorbent assay 1240.

Grapevine,

- infection, *Vitis vinifera*, disease control, *Nematoda* vectors 4131.

Grapevine,

- mixed infection, alfalfa mosaic virus, *Vitis vinifera* 2178.

Grapevine,

- mixed infection, effects on leaves, *Vitis vinifera* 5784.

Grapevine,

- infection, *Vitis vinifera*, pathogenesis, ultrastructure, virus-like particles 5782.

Grapevine,

- infection, *Vitis vinifera*, pathogenesis, ultrastructure, virus-like particles 5782.

Grapevine,

- infection, *Vitis vinifera*, pathogenesis, ultrastructure, virus-like particles 5782.

Grapevine,

- infection, *Vitis vinifera*, pathogenesis, ultrastructure, virus-like particles 5782.

Grapevine,

- infection, *Vitis vinifera*, pathogenesis, ultrastructure, virus-like particles 5782.

Grapevine,

- infection, *Vitis vinifera*, pathogenesis, ultrastructure, virus-like particles 5782.

Grapevine,

- infection, *Vitis vinifera*, pathogenesis, ultrastructure, virus-like particles 5782.

Grapevine,

- infection, *Vitis vinifera*, pathogenesis, ultrastructure, virus-like particles 5782.

Grapevine,

- infection, *Vitis vinifera*, pathogenesis, ultrastructure, virus-like particles 5782.

Grapevine,

- infection, *Vitis vinifera*, pathogenesis, ultrastructure, virus-like particles 5782.

Grapevine,

- infection, *Vitis vinifera*, pathogenesis, ultrastructure, virus-like particles 5782.

- Graphium**, infection, relationship air pollution sensitivity, *Pinus strobus* 5866.
- Graphium penicillioideae**, biosynthesis, pectate lyase, pectin lyase 5515.
- Grasses**, cover, soil biochemical characteristics, microorganisms activity, slope exposure, erosion relationship 7826.
- Grasslands**, *Chionochloa rigida*, soil, assays, β -D-fructofuranosidase, amylase, pH effects on, New Zealand 9565.
- Chionochloa rigida*, soil, assays, amylase, β -D-fructofuranosidase, buffers, New Zealand 9564.
- fertilizer applications, soil properties, denitrification, denitrifying bacteria 8687.
- nitrogen cycle 2372.
- nitrogen fixation, pollution effects, heavy metals, *Trifolium repens*, nitrogen-fixing bacteria 8686.
- nitrous oxide production, fertilizer applications, denitrification 6995.
- soil, nitrogen cycle, fertilization 9614.
- tropical environment, respiration, soil properties, seasonal variations 561.
- Grassy stunt virus**, disease resistance, inheritance, *Oryza sativa*, *Oryza nivara* 5037.
- disease transmission, *Nilaparvata lugens*, *Oryza sativa* 4952.
- Gratelin**, synthesis, antibacterial activity 8884.
- Graveolone**, induction, *Petroselinum hortense* cell culture, fungi infection 5765.
- Grazing**, *Acanthamoeba polyphaga*, effects on *Pseudomonas cepacia* nitrogen mineralization 614.
- animals, lupinus, relationship, *Lupinus furi* infection 5005.
- cattle, environmental impact, surface water, water quality, streams, USA, Colorado 8973.
- Collembola*, effects on, nitrogen, cations leaching, fungi mycelia, leaf litter decomposition 3212.
- nitrogen cycle, *Panicum coloratum* 1484.
- Greasy spot**, *Citrus paradisi*, disease control, fungicides, foliar applications 5834.
- Mycosphaerella citri*, *Citrus latifolia*, epidemiology, USA, Florida 9376.
- Gravice**, oral hygiene, relationship oral diseases, military personnel 8080.
- Green mold**, oranges, antifungal activity comparison, thiabendazole, sodium orthophenylphosphate, CGA-64251 1319.
- Penicillium digitatum*, oranges, post-harvest decay, imazalil treatment 9452.
- Greenhouses**, *Cymbidium*, *Cattleya*, mycorrhizas symbiosis 9562.
- incidence, *Phytophthora* infection, *Rhododendron*, *Azalea*, *Ilex coccinea* 1282.
- ornamental plants, fungi pathogens, fungicides resistance 4099.
- ornamental plants, inoculation methodology, *Erwinia chrysanthemi* 2229.
- plants, powdery mildew disease control, ectaconazole treatment 5004.
- plants seedlings, damping-off, *Pythium* infection 1265.
- Rhododendron*, disease control, *Phytophthora dieback* 9419.
- Rhododendron*, incidences, mycorrhizas, USA, Rhode Island 4202.
- Sacharum, *Ustilago scitaminea* isolates differentiation 5001.
- soil, source, dispersal, *Pythium*, *Rhizoctonia solani* 3698.
- trials, nitrogen fixation estimation, isotopes dilution methodology 5126.
- USA, North Carolina, plant diseases, roots, crops, fungi, bacteria 9411.
- Greening**, disease transmission, *Cuscuta* role, *Citrus sinensis*, *Vinca rosea* 9448.
- Gremmeniella abietina**, canker, *Pinus sylvestris* survival, reforestation 4164.
- infection, *Pinus*, disease resistance 3175.
- races, gas chromatography, use, characterization, differentiation 4531.
- Grey mold**, *Botrytis cinerea*, air composition, effects on, *Fragaria chiloensis* var. *ananassa* 5028.
- Botrytis cinerea*, antifungal agents, disease control, *Rubus idaeus* 487.
- Botrytis cinerea*, dicarboximides resistance, greenhouses 8884.
- Botrytis cinerea*, disease control, *Cyclamen graecum*, iprodione, procymidone, vinclozolin 1424.
- Botrytis cinerea*, host-parasite interactions, ultrastructure, role aromatic compounds production, fruits, *Vitis vinifera* 9402.
- Botrytis cinerea*, *Plasium sativum* 7663.
- Grinding**, +heat, pretreatment, cellulose, hydrolysis, cellulase, *Trichoderma harzianum* 6650.
- Griseofulvin**, antifungal activity, dermatophyte fungi 9682.
- assays 6180.
- Grisein**, production, *Streptomyces griseus*, storage conditions effects on 8120.
- Ground water**, bacteria, counting methods 3485.
- bacteria, microbial pollution 2623.
- bacteria, vertical distribution 8670.
- fecal coliforms movement, sewage waste disposal sites 9814.
- microbial pollution, indicator species, *Salmonella typhimurium*, *Escherichia coli*, *Streptococcus faecalis*, phage 12, enterovirus 8979.
- microbial pollution, phages tracers 3479.
- sediments, microorganisms biomass detection methodology, association, glycerol assays 4466.
- Growth**, *Aster pseudoplatanus* seedlings, endomycorrhizas effects on 531.
- Allium cepa*, mycorrhizas effects on 586.
- Arachis hypogaea*, seedlings, *Cercospora arachidicola* leafspot effects on 341.
- association, bacteria, wood extracts nutrient sources 3.
- association, hydrogen biosynthesis, *Citrobacter intermedium*, *Clostridium pasteurianum* 124.
- Bacillus cereus*, *Clostridium perfringens*, food contamination, beans 219.
- bacteria, cold storage, packaging, beef, liver, tongue 267.
- bacteria, contamination, beef, packaging 265.
- bacteria, mammalian cells, 2-hexadecanoic acid effects on 683.
- bacteria, zones, relationship, time, polyene antibiotics, antibiotic sensitivity testing 2520.
- Basidiomycetes* mycelia, soil, association, plants 1478.
- Growth, (continued)**
- Candida utilis*, ethanol biosynthesis, fermenters 138.
- carbon dioxide effects on yeasts 141.
- Clostridium botulinum*, effects on, toxigenicity toxicity, seafood 309.
- Clostridium botulinum*, toxigenicity, nitrite inhibition, organoleptic properties, sausages 303.
- effects on symptoms, *Pseudomonas syringae* pv. *tagetis* infection, *Tagetes* 2231.
- Fomes annosus*, ozone effects on 541.
- fungi, monitoring, propionic acid, antifungal activity, preservation, feeds 1086.
- Klebsiella pneumoniae*, glucose, cyclic AMP, effects on enzymes 1938.
- Laccaria laccata*, effects on, *Coniferales* 532.
- methodology, *Clostridium perfringens*, bacteriocins analysis 2705.
- Penicillium*, penicillin biosynthesis, iron effects on 1617.
- Picea sitchensis*, *Picea glauca*, mycorrhizas, effects on 530.
- Pinus lambertiana*, *Lophodermella arcuata* infection effects on, disease spread 1461.
- Plasmopara viticola*, downy mildew, tissue culture, *Vitis vinifera* 1289.
- Pseudomonas fluorescens*, association, batch culture 106.
- Pseudomonas fluorescens*, cinnamic acid, esters, inhibition 1555.
- psychrotrophic bacteria, milk, dissolved oxygen, cold storage 239.
- reactors, factors affecting, thermus, *Bacillus*, methodology 1794.
- revegetation, mines, mycorrhizas inoculation, *Coniferales* 519.
- Rhizobium*, nitrogen fixation, soil, salinity, effects on 597.
- Rhizoctonia solani*, hyphae extension, valdimycin inhibition 1568.
- roots, *Pisolithus tinctorius* effects on *Malus domestica*, association, indole-3-acetic acid 591.
- Saccharomyces cerevisiae*, sodium chloride, effects on, lysine, levels 17.
- Saccharomyces fragilis*, nutrient requirements 926.
- Salmonella typhimurium*, *Staphylococcus aureus*, mayonnaise, meat, refrigeration 223.
- seedlings, soil properties 522.
- seedlings, *Sophora secundiflora*, mycorrhizas effects on 583.
- Serratia marcescens*, sodium dodecylbenzene sulfonate, propanol, effects on 2460.
- soil microorganisms, fungi, ammonia, volatiles, effects on 2349.
- soil pH, phosphorus effects on, *Ainus glutinosa* 555.
- soil properties effects on, *Pseudotsuga menziesii*, *Tsuga heterophylla* 520.
- Staphylococcus aureus*, contamination, beef, packaging 272.
- Staphylococcus aureus*, enterotoxins biosynthesis, sodium chloride, potassium chloride, ripening, cheddar cheese 2037.
- Staphylococcus aureus*, enterotoxins production, sandwiches, packaging 1091.
- Staphylococcus aureus*, water activity, media solutes 864.
- Staphylococcus aureus*, colonization, catheters 2638.
- Thermus aquaticus*, continuous culture, media (culture) 2691.
- Trifolium repens*, inhibition, infection, clover yellow vein virus ± *Codinaea fertis* 2100.
- Trifolium repens*, mycorrhizas association, *Brassica* effects on 585.
- Vibrio cholerae*, batch culture, fermenters, factors affecting 2706.
- Vigna unguiculata*, *Phaseolus vulgaris*, *Zea mays*, crop rotation, nodulation 1504.
- volcanic *Escherichia coli* cell division 1984.
- Yersinia enterocolitica*, survival, pH effects on, yogurt 1080.
- Growth conditions**, *Aeschnomena indica*, nitrogen fixation, *Rhizobium* 3244.
- Aspergillus oryzae* var. *brunneus*, liquid culture 4522.
- Clostridium saccharolyticum*, ethanol, production, media (culture) 5575.
- Clostridium saccharolyticum*, nutrient requirements, ethanol, production 5574.
- effects on Ames test 9022.
- effects on, *Aspergillus aleuticus*, production, cellulase, media (culture) 3698.
- effects on, biosynthesis, cephalosporin C, relationship, proteolytic enzymes, *Acremonium chrysogenum* 4375.
- effects on, films, formation, methodology, *Pseudomonas putida* 2669.
- effects on, synchronous culture, oil, *Lodderomyces elongisporus* 4266.
- ethanol fermentation 8404.
- media (culture), agar, *Methanococcus maripaludis*, *Methanococcus voltae*, methodology 9050.
- microorganisms, olives oil cake biodegradation 4746.
- Penicillium funiculosum* triacylglycerol lipase biosynthesis 4656.
- relationship, chlorine dioxide, drug sensitivity testing, *Escherichia coli* 667.
- Salmonella anzoangae*, effects on heat resistance 1538.
- tryptophan, production, *Achromobacter liquidum* 8203.
- Growth curves**, *Escherichia coli*, association, exposure, ampicillin, amoxicillin 7054.
- Streptomyces hygroscopicus* cell culture, mathematical models, identification 3580.
- Growth factors**, production, *Lyopocarpus esculentum*, *Meloidogyne incognita*, interaction, *Fusarium oxysporum* f.sp. *lyopersici*, effects on 1276.
- Growth inhibition test**, media (culture), identification, *Kingella denitrificans*, *Neisseria gonorrhoeae* 9925.
- Sporoplasma*, use, taxonomy 2687.
- Growth patterns**, *Saccharomyces rouxi*, isolation, chocolate 4822.
- Growth rate**, *Bacillus subtilis*, α -amylase production 2795.
- common bean mosaic virus infection, *Plasium sativum* 8539.
- Monilinia fructicola*, benomyl effects on 1413.
- relationship, cell cycle analysis methodology, bacteria 3559.
- Rhizoctonia solani*, quinolone resistance 4268.
- Vibrio parahaemolyticus*, correlation proteinase biosynthesis 1943.
- Growth regulators**, effects on pathology, *Cylindrocadium crotalariae* root rot, *Glycine max* 3909.
- plants, *Fusarium* production 7491.
- GTP**, production, *Candida* 5537.
- sensitivity, *Acetobacter ornithine decarboxylase*, spermine biosynthesis 8371.
- GTP cyclohydrolase**, purification, kinetics, *Pichia guilliermondii* 7351.
- Gualacoi**, veratrate metabolism intermediates, yeasts, characterization 8439.
- Gualacols**, conversion, *Arthrobacter* 2889.
- Guanidine**, +2,4-dioxohexahydro-1,3,5-triazine, antiviral activity, viruses infection, *Nicotiana tabacum* 6886.
- effects on foot-and-mouth disease virus strains, growth 2469.
- treatment, viruses infection, *Nicotiana tabacum*, *Hordeum vulgare* 1198.

- Guanidine hydrochloride**, denaturation β -lactamase, *Staphylococcus aureus* 3702.
- 3-Guainidinopropionate amidinohydrolase**, *Pseudomonas aeruginosa*, purification, characterization 1918.
- Guanine**, biodegradation, soil 5890.
triosin A binding 8030.
- Guar gum**, biodegradation, *Bacteroides ovatus* 172.
- Guava**, post-harvest decay, disease control, benomyl, guazatine 6832.
- Guazatine**, disease control, post-harvest decay, guavas 6832.
- Guignardia laricina**, phytothons, structure, characterization 8521.
shoot blight, *Larix leptolepis*, association, phytotoxins 4161
- Guzlotia abyssinica**, seeds germination, phytotoxins inhibition, fungi 2082.
- L-Gulonolactone oxidase**, purification, characterization, *Saccharomyces cerevisiae* 56.
- Gummosis**, *Amygdalus communis*, fungi etiology 3030.
Botryosphaeria dothidea, disease resistance, *Prunus persica* 2248.
Botryosphaeria, pathology, *Prunus persica* 1217.
Prunus persica, epidemiology 1214.
- Guyana**, tropical environment, leaf litter decomposition, forests 8447.
- Gycerol-3-phosphate dehydrogenase**, assays, *Streptomyces coelicolor* 7310.
- Gymnosascus reaei**, tomatidine biodegradation 3773.
- Gymnosporangium fuscum**, basidiospores, spore germination, haustoria, penetration, *Vitis vinifera* 1284.
- Gyromitra esculenta**, gyromitrin metabolites, N-methyl-N-formyl hydrazine, mutagenicity, Ames test 6708.
- Gyromitrin**, metabolites, N-methyl-N-formyl hydrazine, *Gyromitra esculenta*, mutagenicity, Ames test 6708.
- Habitat**, diversity, soil microorganisms 6960.
relationship *Cronartium coleosporioides*, blister rust, *Pinus contorta*, USA, Idaho 5962.
vascular-arbuscular mycorrhizas, ecological distribution, soil properties 570.
- Habitat selection**, Carabidae, role olfactory stimuli, soil microorganisms 9532.
- Haematophorophyin**, derivatives, effects on antibiotic resistance, gram-positive bacteria 3269.
- Haemophilus**, antibacterial activity, midcancynin, new records 8893.
cefazidime antibacterial activity 7142.
cefotaxime methodology 3590.
norfloxacin antibacterial activity 7057.
- Haemophilus ducreyi**, antibiotic sensitivity testing, media (isolation) 9711.
antibiotics susceptibility 6103.
chancroid clinical isolates, antibiotic sensitivity testing, association, treatment, man 5191.
detection, association, starch aggregation 3583.
- Haemophilus equigenitalis**, cefotaxime antibacterial activity 8834.
media (transport) 3591.
protein, electrophoretic mobility 6372.
- Haemophilus influenzae**, ampicillin antibiotic resistance, role β -lactamase 2400.
M.K. 0366 antibacterial activity 6055.
antibacterial activity, β -lactam antibiotics 7981.
antibacterial activity, β -lactam antibiotics, cephalosporins 6119.
antibacterial activity, cefaclor, cefadroxil 731.
antibacterial activity, cefotetan 4356.
antibacterial activity, ceftazidime 4367.
antibacterial activity, ceftazidime, cephalosporins 4353.
antibacterial activity, ceftriaxone, moxalactam, chloramphenicol 2511.
antibacterial activity, chloramphenicol, thiamphenicol 758.
antibacterial activity, tobramycin 7184.
antibacterial activity, macrolide antibiotics 8041.
antibacterial activity, mezlocillin, companion, penicillins 6141.
antibacterial activity, N-formimidoyl thienamycin 2061.
antibacterial activity, temocillin 2554.
antibacterial activity, temocillin, ampicillin 2552.
antibiotic resistance, β -lactamase, plasmids characterization, transfer 644.
antibiotic resistance, antibiotic sensitivity testing, chloramphenicol, tetracycline 7873.
antibiotic sensitivity testing 6111.
antigens, detection, latex agglutination 2663.
bactericidal activity, cefadroxil, cephalixin 7137.
bactericidal activity, chloramphenicol, chloramphenicol, ampicillin, cefamandole 3418.
biotyping, relationship, virulence, antibiotic resistance, ampicillin, in vitro 7048.
capsules polysaccharides, association cotrimoxazole tolerance 1562.
capsules polysaccharides, carbohydrate composition, N.M.R. 7438.
cerebrospinal fluid, detection, Phadebact test, latex agglutination, counter immunoelectrophoresis, meningitis diagnosis 9941.
children blood culture, detection, use, acidine orange, gram stain, methylene blue 8140.
clinical isolates, antibacterial activity, cefoxitin, tobramycin, companion N-formimidoyl thienamycin 7076.
clinical isolates, antibiotic sensitivity testing, antibiotic resistance 7985.
clinical isolates, antibiotics susceptibility 9721.
clinical isolates, storage association survival 2681.
companion, *Escherichia coli*, chloramphenicol, bactericidal activity, cell cycle 5259.
DNA-binding protein, purification, characterization 7283.
- Haemophilus influenzae**, (continued)
immunoelectrophoresis, identification, serotyping 8113.
inoculum size effects on cephalosporins, antibacterial activity 2532.
 β -lactam antibiotics antibacterial activity 717.
 β -lactamase activity, detection methodology 7318.
 β -lactamase inhibitors, cephalosporins synergism 6133.
 β -lactamase production, activity, association, antibacterial activity, β -lactam antibiotics 9736.
media (culture), detection, bacteremia diagnosis, children 9934.
media (selective), respiratory tract isolation 9952.
meningitis, diagnosis, latex agglutination 9957.
meningitis, latex agglutination diagnosis, man 3597.
mezlocillin, antibacterial activity 6143.
nasopharynx isolates, antibacterial activity, cotrimoxazole, trimethoprim, sulfamethoxazole 7066.
otitis media, ampicillin resistance, man 647.
piperacillin antibacterial activity 8844.
polysaccharides, cattle serum albumin conjugate, hydrodynamics, light scattering 978.
strains, β -lactam antibiotics resistance 4284.
temocillin antibacterial activity 2550.
temocillin antibacterial activity 6155.
- Haemophilus influenzae type b**, antibacterial activity, cefaclor, association, inoculum size 732.
clinical isolates, ampicillin β -lactamase 653.
temocillin antibacterial activity 2546.
- Haemophilus parahaemolyticus**, animal isolates, antibiotic sensitivity testing, sulfonamides sensitivity 5189.
- Haemophilus parainfluenzae**, antibiotic resistance, antibiotic sensitivity testing, chloramphenicol, tetracycline 7873.
- Haemophilus pleuropneumoniae**, isolation, pigs, methodology 9958.
serotypes, antigenic relationship, indirect hemagglutination 9963.
- Haemophilus somnus**, antibiotic sensitivity testing 2515.
- Haemophilus vaginalis**, media (isolation), vagina, cervix, man 8112.
- Hafnia alvei**, histamine biosynthesis, food poisoning 121.
- Hair**, roots, efficacy roots, antifungal agents, methodology, guinea-pigs 8164.
- Hakea sericea**, weed control, biological control, *Colletotrichum gloeosporioides*, field trials 9408.
- Half-life**, herbicides, MCPB 5971.
- Halides**, antiviral activity, pseudorabies virus inactivation 3353.
- Haemophilus**, clinical isolates, antibacterial activity, ceftazidime, cefotaxime, moxalactam 4365.
- Halo blight**, *Pseudomonas syringae* subsp. *phaseolicola*, effects on *Phaseolus vulgaris*, *Pseudomonas* putida, purification, physicochemical properties 1872.
purification, characterization, *Pseudomonas* 7370.
- Halobacterium**, microbiology, methodology 8110.
- Halobacterium halobium**, bacteriorhodopsin, folding, subunit assembly, structure-activity relationships 5484.
ferredoxin, Raman spectroscopy 4558.
lipids, use food additives, feeding trials, mice 245.
membrane proteins fractionation 2739.
purple membranes, bacteriorhodopsin, photochemistry, I.R. spectroscopy 4554.
purple membranes, bacteriorhodopsin, secondary structure, C.D. 6393.
purple membranes, retinal-binding protein, purification, characterization, bacteriorhodopsin deficient mutant 4561.
RNA polymerase, purification, characterization 7334.
serine proteinase purification, characterization 7393.
- Halobacterium marismortui**, malate dehydrogenase, X-ray scattering 931.
- Halobacterium salinarum**, citrate synthase, succinyl-CoA synthetase (GDP-forming), isolation, characterization 5497.
- Halogenoforic compounds**, antibacterial activity, *Mycobacterium*, *Staphylococcus aureus* 2438.
- Haloalkylmalonic esters**, bacteria, microorganisms, membrane permeability, enzymatic activity 7957.
- Haloperidol**, antibacterial activity 8753.
- Halophilic bacteria**, sea water, antibacterial activity 3318.
- Ham**, curing, freeze-thawing effects on food contamination, bacteria levels 182.
food contamination, bacteria 3832.
smoking, curing, contamination, growth, yeasts, fungi, bacteria 180.
- Hamigens avelanae**, soil microorganisms, Spain, check lists 3202.
- Hand**, disinfection, dentistry, man 8988.
disinfection, germicides, man 816.
microflora, antibacterial activity, chlorhexidine, man 6275.
washing, effects on shigellosis disease spread, man, Bangladesh 5356.
- Hansenula**, phenylacetylcarbinol production 1974.
- Hansenula anomala**, acidity, heat inactivation, fruit juices 5636.
Candida krusei, *Candida*, *Candida* candidum, mixed culture, protein biosynthesis, whiskey distilleries wastes 15.
heat inactivation, fruit juices 2039.

Hansenula anomala, (continued)

lactate dehydrogenase (cytochrome) subunits, characterization, purification 4623.
nitrate reductase (NAD(P)H), assimilation, electron transfer, distribution 6517.
nitrate reductase (NAD(P)H), purification, characterization 5502.
oxygen effects on flavocytochrome b2 biosynthesis 5473.
single-cell protein, production, distilleries, industrial effluents, nutritive value, feeding trials, rats 8489.

Hansenula anomala var. achneagalli

quinone conversion 6647.

Hansenula jadnili

fermentation, cytidine 5'-diphosphate choline, ATP, regeneration 1960.

Hansenula miao

pyruvate dehydrogenase multienzyme complexes, purification, characterization 1646.

Hansenula polymorpha

alcohol oxidase inactivation, selectivity, high-performance liquid chromatography 98.

bioreactors, media (culture), aeration, reviews 8094.

carbohydrate composition, association, carbon dioxide recycling, nutrient requirements, relationship, space flight, food, man 8486.

cells, separation techniques, flotation 6349.

chorismate mutase, purification, characterization 40.

fructose-bisphosphatase characterization 32.

Hansenula wingel

fermentation induction, factors affecting 8400.

Haplidity

Brassica napus, heredity, disease resistance, *Phoma lingam* 450.

Heptaglobulin

binding *Sordetella pertussis* toxins, enzyme-linked immunosorbent assay 6720.

Hartig net

Alpova diplophloeus ectomycorrhizas, Frankia colonization, *Alnus crispa*, *Alnus rugosa* 7776.

Pisolithus tinctorius, cytology, roots, *Pinus strobus* 9510.

Hatchability

eggs, nuclease polyhedrosis virus infection effects on, *Hyphantria cunea* 1044.

Haustoria

Atkinsonia ligustrina, xylem transport, host-pathogen interactions, *Loranthaceae* 5790.

Erysiphe graminis f.sp. hordei, growth, host-pathogen interactions, *Hordeum vulgare* 9347.

formation, *Puccinia hordei* infection, *Hordeum* 2133.

Gymnosporangium fuscum, penetration, *Vitis vinifera* 1284.

Puccinia coronata f.sp. avenae, interaction, *Avena sativa*, cells, ultrastructure 2136.

rust, growth, necrosis, *Vigna unguiculata* 3922.

ultrastructure, *Erysiphe graminis f.sp. hordei*, powdery mildew, defense mechanisms, *Hordeum vulgare* 6838.

Hay spoilage

fungi, prevention, antifungal agents 247.

HCH

peathy fields soil, effects on nitrogen fixation, heterotrophic bacteria 619.

Health

man, *Lactobacillus acidophilus*, ice cream 4836.

Heart

prosthetics, benzalkonium chloride-o-xacillin binding, postoperative infection prophylaxis, dogs 5343.

Heart rot

wood decay, oxygen, carbon dioxide effects on 5084.

Heat

activation, *Escherichia coli* enterotoxins 3894.

disinfection, microorganisms, models 4461.

effects on viruses inactivation, ammonia role 7945.

exchange, cleaning systems, food industry, bacteria, contamination 4784.

fermentation, fungi, respiration, carbon sources 145.

+grinding, pretreatment, cellulose, hydrolysis, cellulase, *Trichoderma harzianum* 8650.

inactivation, yeasts, fruit juices 2039.

output, aerobic bacteria, pigs wastes biodegradation 2888.

production, aquatic bacteria, calorimetry methodology 8145.

production, association, fermentation, measuring techniques 1052.

sensitivity, *Campylobacter fetus* subsp. jejuni, pasteurization, milk 2060.

+sodium hydroxide, pretreatment, Zea mays crop residues, hydrolysis, cellulase, *Trichoderma viride* 8448.

stability, *Staphylococcus aureus* deoxyribonuclease, deflection, food contamination 9278.

sterilization, lactose solutions, *Thermomonospora* growth inhibition 2907.

Heat balance

leaves, tobacco mosaic virus infection, *Nicotiana tabacum* 1288.

microorganisms, *in vitro*, calorimetry+fermenters measuring techniques 7215.

Heat inactivation

alkanol monoxygenase (FMN-linked), bacteria 6479.

Bacillus sphaericus, biological control, larvae, *Anopheles stephensi* 6612.

Bacillus stearothermophilus spores, soybean milk 207.

calicivirus, biological control, disease resistance, heat resistance, *Amyeloidis transitella* 5543.

Chlamydia 8714.

coxsackievirus B5, methodology, food processing 1092.

β -D-fructofuranosidase, immobilized enzymes, *Saccharomyces cerevisiae* 9150.

glucose oxidase, immobilized enzymes, *Aspergillus niger* 43.

yeasts, potassium sorbate+sodium benzoate, acidity effects on, fruit juices 5636.

Heat resistance

Bacillus cereus spores, germination, association, diarrhea, emetics, food contamination, man 193.

Bacillus megaterium spores, association, phosphate media 3280.

biological control, disease resistance, calicivirus, *Amyeloidis transitella* 5549.

Lactobacillus fermentum, pectin protection, tomatoes juices 8660.

Micrococcales, sodium chloride, eggs effects on 4648.

psychrotrophic bacteria, dairy products, incidence, identification 4814.

Saccharomyces, *Kluyveromyces*, ascospores 1631.

Salmonella arizonae, growth conditions effects on 1538.

Salmonella senftenberg, liquid culture, Sucrose levels effects on 670.

Streptococcus group D 2402.

Heat shock

induction, *Saccharomyces cerevisiae* ribonuclease 4689.

Heat transfer

Clostridium botulinum spores inactivation, mushrooms, canning 1093.

equipment, fouling organisms, bacteria, books 5444.

sterilization, canning 2059.

Heat treatment

meristem tip culture elimination, association, regeneration, viruses infection 469.

Heat treatments

\pm benomyl, \pm acetone, seed treatments, *Fusarium moniiforme* elimination, corn 5845.

disease control, grapevine fanleaf virus, grapevine leaf roll virus, grapevine vein banding virus, *Vitis vinifera* 2245.

disease control, *Pyrenophora graminea*, *Pyrenophora teres*, infection, seeds, *Hordeum vulgare* 1430.

disease control, Saccharum, ratoon stunt, bacteria 9468.

effects on, bacteria, beef, food spoilage, reviews 8488.

Pyrenus avium, bacteria, food spoilage, liqueur meat, food processing 6678.

effects on cheese fermentation 4803.

Manihot esculenta, mosaic disease, cassava common mosaic virus 1312.

milk, effects on *Streptococcus lactis* 8470.

milk, effects on, *Streptococcus thermophilus*, *Lactobacillus acidophilus* 6664.

Olea europaea, factors affecting, *Lactobacillus plantarum*, fermentation 7592.

Pyrenus avium, viruses elimination 8585.

+ γ radiation+chemicals, control, *Rhizopus nigricans* post-harvest decay, tomatoes 2237.

+sodium chloride, aflatoxins removal, peanuts 6689.

soil, *Pseudomonas maltophilia*, biodegradation, herbicides 5904.

Solanum tuberosum, infection, potato virus X, potato virus Y 2155.

sterilization, association, microorganisms reactivation 2499.

tryptone, antibacterial agents production 8777.

Heathie

Calluna vulgaris, fatty acids isolation, identification, phytotoxicity, antifungal activity 5929.

Calluna vulgaris, soil, microorganisms biodegradation production fatty acids, antifungal activity, seasonal variations 5930.

Heavy metals

accumulation, activated sludge 5296.

adsorption, extracellular polymers, bacteria, activated sludge 1689.

adsorption, extracellular polymers, bacteria, activated sludge 1690.

Bacteroides susceptibility 681.

effects on ammonification, nitrification, nitrifying bacteria, soil pollution 4238.

Ehrharia calycina uptake, *Glomus fasciculatum* stimulation, acid rain 7805.

gradients, soil, respiration, fungi population dynamics association, Sweden 6898.

leaching, heterotrophic microorganisms, screening methodology 3256.

levels, oil, waste disposal, biodegradation, revegetation, semiarid environments 7020.

pollution effects, nitrogen fixation, grasslands, *Trifolium repens*, nitrogen-fixing bacteria 8686.

resistance, Enterobacteriaceae, heavy metals, harbors sediments isolates 9645.

resistance, *Staphylococcus aureus*, *Staphylococcus intermedius*, animal isolates 3279.

salts, *Spiroplasma* sensitivity 2441.

tolerance, activated sludge bacteria, copper bioaccumulation, wastewater treatment 6246.

toxicity, thermophilic bacteria, sewage sludge, digestion (anaerobic) 8063.

Hebe

leafspot, *Septoria veronicae*, pathogenicity 5757.

Hebeloma crustuliniforme

effects on, growth, *Picea sitchensis*, *Picea glauca* 530.

Hebeloma saccharolens

mycorrhizas, inoculation, seedlings, trees 5857.

Hedychium coronarium

incidence, *Azospirillum*, rhizosphere microorganisms, tropical environment 7853.

Hedysarum coronarium

Rhizobium symbiosis, nitrogen fixation, Israel 5947.

symbiosis, *Glomus mosseae*, growth, Italy 6975.

Height

Oryza sativa, sheath blight, effects on yield 3017.

Triticum aestivum, plant breeding, disease resistance, leaf blotch, *Septoria tritici* 454.

HeLa cells

effects on, *Pseudomonas aeruginosa* exotoxins, bacteriostats, cytostatic agents 1108.

poliovirus, herpes simplex virus 2, antiviral activity, hygromycin B 7947.

Helianthus

crown gall, *Agrobacterium tumefaciens*, initiation, cell adhesion 3060.

disease resistance, *Alternaria helianthi*, infection 5766.

powdery mildew, *Erysiphe cichoracearum*, disease resistance 1278.

Helianthus annuus

Agrobacterium tumefaciens, crown gall, temperature effects on 8574.

Alternaria alternata growth, dew, temperature, light, effects on 6800.

Alternaria helianthi infection, factors affecting 6799.

blight, *Alternaria helianthi*, inoculum production 5746.

charcoal rot disease transmission, *Cylindrocapsa aspersus* role 9444.

chlorosis, *Pseudomonas syringae* pv. tagetis, host range 1304.

disease resistance, downy mildew, *Plasmopara halstedii* 4066.

downy mildew, disease control, metalaxyl 1418.

downy mildew, *Plasmopara halstedii*, effects on, metabolism 3987.

downy mildew, *Plasmopara halstedii*, *Erysiphe cichoracearum*, *Sphaerotheca fuliginea* 4006.

germplasm screening, disease resistance, rust, *Puccinia helianthi* 4064.

infection, *Alternaria helianthi*, sporulation, survival 7712.

leafspot 1255.

leafspot, *Pseudomonas syringae* pv. tagetis, seed-borne diseases 1303.

leafspot, *Septoria helianthi*, new records, Pakistan 7697.

Macrophomina phaseolina charcoal rot, incidence, distribution, Spain 9416.

phenylalanine ammonia-lyase, kinetics, stimulation, downy mildew, *Plasmopara halstedii* 9405.

seedlings, *Rhizoctonia solani* infection, disease control, fungicides 6870.

seeds coats, autohydrolysis-explosion pretreatment, effects on *Trichoderma reesei* cellulase hydrolysis 9136.

Septoria helianthi leafspot, incidence, identification, Turkey 9438.

sesquiterpenes lactones, antimicrobial activity 7953.

stem spot 1255.

tobacco streak virus infection, pathology, host range 9430.

- Helianthus tuberosus**,
carbohydrates, ethanol, role yeasts 2389.
extracts, media (culture), yeasts, single-cell protein, production 7606.
plant extracts, inulin, use, *Saccharomyces rosei*, ethanol production 8410
- Helichrysum plicatum**,
extracts, antibacterial activity 2443.
- Helicostylum pliciforme**,
bto acids conversion 3798.
- Heliothis**,
pest control, *Heliothis zea* nuclear polyhedrosis virus 1041.
- Heliothis armigera**,
biological control, *Bacillus thuringiensis* 5559.
- Heliothis virescens**,
larvae, biological control, baculovirus 4719.
pest control, nuclear polyhedrosis virus 7224.
pest control, nuclear polyhedrosis virus, *Gicer atrinum* extracts, feeding behavior, stimulants 6598.
- Heliothis zea**,
biological control, nuclear polyhedrosis virus 996.
biological control, pest control, adjuvants, efficacy 6595.
biological control, sprays, adjuvants, pathogens, nuclear polyhedrosis virus 5547.
nuclear polyhedrosis virus, pest control, *Heliothis* 1041.
- Heliscus lugdunensis**,
biodegradation, *Populus tremuloides*, leaf litter 8045.
- Helminthosporium**,
leafspot, disease control, fungicides, *Cocos nucifera* 1391.
- Helminthosporium carbonum**,
cyclic peptides toxins, conformation, N.M.R. 7618.
host-parasite interactions, etiolation, seedlings, *Zea mays*, *Helminthosporium carbonum* 3015.
infected, *Medicago rugosa*, leaves, phytoalexins, isolation, characterization 1355.
- Helminthosporium graminum**,
antifungal activity, 1-aryl-3-(3'-nitro-4'-methoxyphenyl)-5-phenyl formazan, 3-aryl-5-(3'-nitro-4'-methoxyphenyl)-2-phenyl tetrazolium bromide 6082.
- Helminthosporium maydis**,
disease resistance, *Zea mays*, mitochondrial proteins electrophoresis 8616.
host-parasite interactions, etiolation, seedlings, *Zea mays* 3015.
infection susceptibility, *Zea mays*, maize dwarf mosaic virus infection effects on 368.
Infection, *Zea mays*, susceptibility, maize dwarf mosaic virus infection effects on 1185.
mixed infection interaction maize dwarf mosaic virus, *Zea mays* 3007.
pathogenicity, genetic analysis, *Zea mays* 3005.
phytooxins, bioassays, use, *Zea mays*, roots, cells 8552.
spores, application, *Zea mays*, leaves, methodology, humidity 9081.
- Helminthosporium oryzae**,
antifungal activity, hyphal sheaveolens leaves oils 494.
antifungal activity, *Lycopersicon lycopersicum* pollen 8605.
antifungal activity, 1,2,4-triazolo[3,4-c]-1,2,4-dithiazoles 8788.
brown spot, biological control, *Streptomyces longisporus* antagonism, *Oryza sativa* 4105.
Caesulia axillaris essential oils antifungal activity 4297.
essential oils antifungal activity, *Mentha arvensis* var. *piperascens* 6876.
- Helminthosporium sacchari**,
helminthosporoid biosynthesis, role β -galactofuranosidase 8504.
helminthosporoid, structure 8508.
toxins structure 7629
- Helminthosporium aestivum**,
leafspot, disease resistance, heredity, *Triticum aestivum* 3121.
- Helminthosporium tritici**,
leaf blight, pathogenesis, *Zea mays*, USA, Ohio 7668.
spore germination, antifungal activity, fruits extracts, *Diospyros cordifolia* 8785.
- Helminthosporoides**,
biosynthesis, role β -galactofuranosidase, *Helminthosporium sacchari* 8504.
Helminthosporium sacchari toxins, structure 8508.
- Hemadsorption**,
detection respiratory syncytial virus antibodies 1742.
- Hemagglutination**,
Bacteriomyces, mycelia, extracts 13.
drug group P1, identification *Escherichia coli* p1 receptors 5402.
diagnosis, syphilis 2665.
fibrinogen, use, *Staphylococcus aureus* identification 844.
methodology, erythrocytes stabilization, viruses 5371.
proteins stabilization, togavirus, bunyavirus 3545.
- Hemagglutination inhibition**,
antibodies detection, measles virus 8093.
immune status determination, rubella, man 9842
measles virus, filter paper methodology 9859
methodology, erythrocytes stabilization, viruses 5371.
rubella virus serum antibodies, immune status, comparison, enzyme-linked immunosorbent assay, indirect hemagglutination 9837.
- Hemagglutinine**,
antibodies detection, *Enterobacter* p1 8364.
Bordetella pertussis, antibodies, enzyme-linked immunosorbent assay 889.
Bordetella pertussis, purification, characterization, use, enzyme-linked immunosorbent assay 886.
chitin binding, *Conidiobolus lamprauges*, purification, immunological aspects 6386.
parainfluenza virus 3, vaccines, immunogenicity, mice, sheep 7189
purification, clostridium botulinum 7635
- Hematology**,
single-cell protein *Arthrobacter simplex* feeding trials effects on, rats 8491.
- Hematoporphyrin**,
antibacterial activity, bacteria 6048.
- Heme**,
cytochrome peroxidase, redox properties, E.S.R., *Pseudomonas aeruginosa* 3696
iron coordination geometry, cytochrome c, N.M.R., *Saccharomyces cerevisiae*, *Candida krusei* 3643.
iron coordination geometry, cytochrome c551, N.M.R., *Rhodospseudomonas gelatinosa* 3653
- Heme P-450**,
hydroxylamine oxidase, reaction carbon monoxide, hydrogen peroxide, mechanisms, *Nitrosomonas europaea* 8282.
- Hemicellulase**,
production, phytopathogenic fungi 6404.
Trichoderma reesei cellulase hydrolysis 9157.
- Hemicellulose**,
hydrolysis, biomass conversion, percolation reactors, mathematical models 9194.
hydrolysis, *Klebsiella pneumoniae*, production, 2,3-butanediol 3739.
- Hemilia vastatrix**,
infection, *Coffea arabica*, plant diseases pathogenicity measuring techniques, mathematical models 1118.
leaf rust, *Coffea arabica*, disease control 4076.
leaf rust, *Coffea canephora* disease resistance, light intensity effects on 3962.
leaf rust, *Coffea*, pathogenicity 6784.
leaf rust, disease control, fungicides, *Coffea arabica* 1341.
leaf rust, disease resistance detection, methodology, *Coffea canephora* 2261.
leaf rust, disease resistance, leaves age effects on, *Coffea arabica* 4976.
leaf rust, epidemiology, *Coffea arabica*, Latin America 1216.
rust, *Coffea arabica*, epidemiology 5015.
rust, *Coffea arabica*, incidence, mathematical models 2150.
rust, *Coffea*, Mexico 5682
- Hemoglobin**,
oxygen supply, microorganisms immobilized cells 6286.
- Hemolysis**,
biosynthesis, *Treponema hyodysenteriae* 2090.
- Hemolysis**,
antibodies detection, measles virus 8093
erythrocytes, influenza A virus antigens detection, factors affecting 824.
- Hemoproteins**,
subunits, sulphite reductase (NADPH), sulfite, nitrite complex formation, *Escherichia coli* 2793
- Hendersonia**,
leafspot, *Eucalyptus*, New Zealand 7706.
- Hendersonia toruloides**,
naphthoquinones derivatives biosynthesis 6605.
- Henosepilachna vigintioctopunctata**,
biological control, *Fusarium moniliforme* var. *subglutinans* 1034.
- Heparin lyase**,
nutrient sources, regulation, production, *Flavobacterium heparinum* 969.
- Hepatitis**,
viruses, diagnosis, enzyme-linked immunosorbent assay, use amidase 2659.
- Hepatitis A**,
diagnosis, enzyme-linked immunosorbent assay, feces, man 4469
man, epidemiology, drinking water contamination, USA, Pennsylvania 7202
man, immunoglobulin M separation techniques, chromatography 1755
outbreaks, epidemiology, drinking water contamination, man 6261.
- Hepatitis A virus**,
assays, use, immunoelectron microscopy 4476.
chlorine, effects on, infectivity, *Sagunus fuscolis*, *Sagunus nigricolis*, *Sagunus labatus labatus*, experimental infection 2488
chlorine inactivation, pH effects on, disinfection, drinking water 9812.
detection methodology 3533.
detection methodology, association antibodies 3521.
hepatitis A, diagnosis, enzyme-linked immunosorbent assay, feces, man 4469
hepatitis A, man, epidemiology, drinking water contamination, USA, Pennsylvania 7202
hepatitis A, outbreaks, epidemiology, drinking water contamination, man 6261.
infected cell culture, quantitation, immunoelectrofocusing 9852.
infection, man, immunoglobulin M separation techniques, chromatography 1755.
- Hepatitis B surface antigen**,
+aluminum hydroxide, vaccines, antibody response, man 783.
antibodies detection use immunoassays solid phase methods 4470
antigen-antibody complexes, detection polyethylene glycol turbidity 826.
antigen-antibody complexes, enzyme-linked immunosorbent assay, use seroepidemiology, man 822.
coagulation, inhibition, radioimmunoassay, detection 828
detection, enzyme immunoassay comparison radioimmunoassay 7220.
detection, enzyme-linked immunosorbent assay, factors affecting sensitivity 5367.
enzyme-linked immunosorbent assay 9016
enzyme-linked immunosorbent assay, use *Amoracia lapathifolia* peroxidase 825
localization liver staining methodology, man 827
radioimmunoassay solid phase methods, factors affecting 821
radioimmunoassay, standardization 3526
- Hepatitis B virus**,
antigens, antibodies, cross-reactivity use, woodchuck hepatitis virus detection, radioimmunoassay 9861.
antigens, use, purification, coagulation factor VIII, column chromatography 3542.
detection, passive reverse hemagglutination, man 2650.
hepatitis B surface antigen-aluminum hydroxide, vaccines, antibody response, man 783.
hepatitis B surface antigen, antigen-antibody complexes, enzyme-linked immunosorbent assay, use seroepidemiology, man 822.
hepatitis B surface antigen, enzyme-linked immunosorbent assay, use *Amoracia lapathifolia* peroxidase 825
hepatitis B surface antigen, enzyme-linked immunosorbent assay 9016
hepatitis B surface antigen, radioimmunoassay, solid phase methods, factors affecting 821
hepatitis B surface antigen, radioimmunoassay standardization 3526
infection markers detection, methodology, filter paper 3524.
receptors, albumin, detection, radioimmunoassay 6295.
vaccines disease control, man 3457
- Heptadeoxykanamycin**,
derivatives, structure-activity relationship 9762
- Heptakis(2,6-O-dimethyl)- β -cyclodextrin**,
effects on *peritissus* toxins biosynthesis, *Bordetella pertussis* 8523.
- Herbicides**,
application, effects on *Rhizobium nodulation*, nitrogen fixation, *Leguminosae* 8688
Beta vulgaris, crop rotation effects on fungi, soil 618
biodegradation *Pseudomonas maltophilia* heat treatments soil 5904.
disease control, *Aspergillus niger* crown rot, *Aspergillus flavus* root rot, *Arachis hypogaea* 2277.
effects on, *Aspergillus flavus*, *Aspergillus parasiticus*, growth, aflatoxins production 7620
effects on *Drechslera sorokiniana* leafspot pathogenesis, *Poa pratensis* leaves senescence 9387
effects on *Macrophoma phaseolina* saprophy, *Glycine max* stems 2380
effects on nitrification, nitrifying bacteria 9619

Hibiscus esculentus, (continued)

4992
High-performance liquid chromatography, aflatoxins, fungi, milk products 3875
analyzers, production, wine, musts, vinegar 9234
antifungal agents quantification, serum, man 5438
dairy products, Aspergillus aflatoxin M1 detection 7614
detection, β -exotoxin, Bacillus thuringiensis 6725
Escherichia coli, fractionation, ribosomal proteins, ribosomal subunit 30S 1775
+ fluorescence, coenzyme F420 assays, methanogenic bacteria, sewage sludge 9021
Hansenula polymorpha, alcohol oxidase inactivation, selectivity 98
p-diamine antibiotics 9713
methanogenic bacteria phospholipids assays, environments isolates 5382
methodology, Agaricus bisporus agaritine isolation 2712
methodology, cell-free system, Streptomyces clavuligerus 1797
muramic acid, bacteria biomass measuring techniques, sediments, marine environment 7252
mycotoxins, contamination, feeds 4893
phages, detection Salmonella 3579
separation, poliovirus, proteins, methodology 8102
separation, poliovirus, structural proteins 7228
4-O-tetrahydro-pyranyladiamycin metabolites 9203
Trichoderma reesei cellulase 7365
High-pressure liquid chromatography, assays, aztreonam, serum, urine 7167
detection, aflatoxins, food contamination, corn, peanuts 3883
isolation, purification, Penicillium viridicatum xanthomegnin 7264
methodology, ceftazidime determination, body fluids, man 8841
methodology, penicillin N purification, Streptomyces clavuligerus 9036
nephropathy, filtration, bacteria 876
sporoderm purification methodology, Pithomyces chartarum spores 3813
tobramycin 8018
Hippuric acid, hydrolysis, identification, Streptococcus group B 9024
Histamine, biosynthesis, bacteria, food poisoning 121
production, Enterobacteriaceae, media (culture), seafood 2674
Histidine, residues, coupling factor 1, diethyl pyrocarbonate chemical modification, inactivation, Rhodospirillum rubrum 8285
residues, endo-1,3(4)- β -D-glucanase, photooxidation effects on activity, Flavobacterium dormitorum 6477
Histidine decarboxylase, N-bromosuccinimide chemical modification tryptophan residues, Micrococcus 24, kinetics, Micrococcus 4684
prohistidine decarboxylase conversion, peptides bonds cleavage, Lactobacillus 4595
Histidinol dehydrogenase, fragments activity, Saccharomyces cerevisiae 2760
Histology, bacteria, stains, scanning electron microscopy 866
Histopathology, Cladosporium fulvum infection, hypersensitive response, Lycopersicon esculentum 249
Colletotrichum fragariae infection, Fragaria vesca 422
Crimipellis perniciososa witches' broom, Theobroma cacao 398
midget, Bacillus sphaericus, Culexidae 1022
Rhizoctonia solani, sheath blight, Oryza sativa 372
viruses leafroll, Vitis vinifera 429
Histoplasma, self fluorescence, use, detection, tissues 8156
Histoplasma capsulatum, cell culture, formalin antifungal activity 8793
cysteine dioxygenase, purification, characterization 2811
histoplasmosis, immunodiagnosis, antigenolubulin hemagglutination test 5434
identification, immunodiffusion 4543
tissues, fluorescence diagnosis, tissues 4525
Histoplasmosis, Histoplasma capsulatum, fluorescence diagnosis, tissues 4525
immunodiagnosis, antigenolubulin hemagglutination test 5434
Histroy, bacteria biodegradation, industries, conferences 4754
Holothuridae, interpe gene glycosides, antimicrobial activity, bacteria, fungi 2494
Homolaoicrate dehydrogenase, purification, characterization, Saccharomycopsis lipolytica 938
Honeydew, damage, crop fields, Aphididae, Triticum 3001
Sitobion avenae, + barley yellow dwarf virus infection effects on pathogenicity, Cladosporium infection, Hordeum vulgare, Triticum aestivum 3934
Hop latent virus, infection, Humulus lupulus, host range, purification, characterization 3037
Hop stunt disease virus, cytopathology, Humulus lupulus 6797
infection, plants, localization, leaves cells 313
Hop stunt viroid, infection, cytology, Humulus lupulus, Cucumis sativus 3039
Hops, aflatoxins contamination 1937
Hordeum, barley stripe mosaic virus, disease transmission, Avena fatua 3002
brown rust, carbon translocation 6769
cell culture, Mortierella infection 1177
disease resistance, genetic analysis, Erysiphe graminis powdery mildew 8627
ergot, epidemiology 1151
Erysiphe graminis infection, pathogenicity, association, tridormorph treatment 485
Erysiphe graminis powdery mildew, treatment, drug resistance 2126
footrot pathogens antagonism, Pseudocercospora herpotrichoides, Fusarium, Rhizoctonia cerealis 1148
fungicides treatment effects on fungi microflora 7766
infection, powdery mildew survival, reproduction 358
leaf rust, disease resistance genes, histology 2265
loose smut, Ustilago nuda virulence genes 4967
nitrogen-fixing bacteria activity, acetylene reduction 1497
plant diseases, fungicides treatment 497

Hordeum, (continued)

powdery mildew disease resistance 482
powdery mildew, Erysiphe graminis, disease resistance, genetic analysis 471
Pseudocercospora herpotrichoides infection, epidemiology, seasonal variations 1150
Puccinia hordei infection, haustoria formation 2133
rhizosphere, rhizoplane, nitrogen fixation, relationship, Spirillum lipoferum 4241
Rhynchosporium secalis infection, herbicides effects on spores quantity Hordeum 489
Rhynchosporium secalis leaf blotch, disease control, antifungal agents treatment timing 488
seed treatments, fungicides, disease control, Cochliobolus sativus infection 1429
f.sp.hordei, Erysiphe graminis, disease resistance association leaves developmental stages 483
Hordeum distichon, vesicular-arbuscular mycorrhizas, role, growth, nutrient uptake, Denmark 5905
Hordeum murinum, wheat dwarf virus infection 2120
Hordeum pusillum, glume blotch, symptoms, Septoria nodorum isolation, characterization, infectivity 6751
Hordeum spontaneum, fertility, association disease resistance, fungi pathogens 6759
Hordeum vulgare, age, growth rate, carbohydrate composition, amino acid composition, association, disease resistance, powdery mildew 6557
barley stripe mosaic virus infection, association, protein composition 6779
barley yellow dwarf virus, disease transmission, vectors, Aphididae 9341
barley yellow dwarf virus infection, disease transmission, vectors 3003
barley yellow dwarf virus, infection, effects on, Sitobion avenae, Rhopalosiphum padi, disease transmission 8553
barley yellow mosaic virus, disease transmission 5729
brome mosaic virus infection, 2,4-dioxohexahydro-1,3,5-triazine + guanidine antiviral activity 6886
calcium nitrate, potassium phosphate, effects on, disease resistance, powdery mildew, Erysiphe graminis 378
Cladosporium infection, Sitobion avenae honeydew + barley yellow dwarf virus infection effects on pathogenicity 3934
coleoptile, penetration, powdery mildew, Erysiphe graminis f.sp.hordei 3947
contamination, ochratoxin A, Aspergillus ochraceus, detoxification, feeding, pigs 7623
contamination, ochratoxin A, Aspergillus ochraceus, kidney, lesions, pigs 7622
cultivation, soils, denitrifying bacteria incidence, identification 6956
defense mechanisms, powdery mildew, Erysiphe graminis f.sp.hordei 6838
detection, brome mosaic virus, barley stripe mosaic virus, immunodiffusion, enzyme-linked immunosorbent assay 6757
disease control, mildew, brown rust, nitrogen fertilizers, fungicides 5838
disease resistance, Erysiphe graminis f.sp.hordei infection, genetic control 6840
disease resistance, Erysiphe graminis f.sp.hordei infection, association, Mi-la locus 8611
disease resistance genes, selection, virulence, Erysiphe graminis f.sp.hordei, powdery mildew 8550
disease resistance, genetic analysis, virulence, Erysiphe graminis f.sp.hordei 8607
disease resistance, Pa gene, rust, Puccinia hordei 1349
disease resistance, scald, Rhynchosporium secalis, genetic analysis 451
Drechslera teres pathogenicity 1181
Erysiphe graminis f.sp.hordei infection, conidia dispersal, Denmark 2128
Erysiphe graminis f.sp.hordei infection, pathogenesis, morphology association 4957
esterase, proteins, disease resistance, powdery mildew, Erysiphe graminis f.sp.hordei 4060
Fusarium culmorum infection, role, Fusarium culmorum infected roots, crop residues 3961
Gaeumannomyces graminis, infection, inoculation, methodology 3949
glume blotch, Septoria nodorum, pathogenicity 3021
grain, cytokinins levels, relationship, disease resistance, mildew, Erysiphe graminis 2249
host range, Septoria nodorum, pathogenicity, spore germination 3019
host-pathogen interactions, Erysiphe graminis f.sp.hordei 9347
leaf blotch, Rhynchosporium secalis 5728
leaf blotch, Rhynchosporium secalis, disease control, fungicides, plant breeding, crop rotation 5809
leaf rust, Puccinia hordei, virulence 2121
leaf stripe, Drechslera graminea, disease spread, seed treatments, effects on 1425
leafspot, Aschocyta avenae, pathogenicity, climatic conditions 8549
leafspot, Drechslera teres 1173
leafspot, symptoms, Septoria nodorum isolation, characterization, infectivity 6751
loose smut, seed treatments, fungicides, reviews 4132
loose blotch, Pyranospora teres, fungicides effects on 7770
nutrients translocation, brown rust 3939
overwintering, barley yellow dwarf virus infection effects on 354
pathology, seedling blight, Septoria nodorum 6767
photosynthesis, translocation, powdery mildew effects on 3931
powdery mildew, Erysiphe graminis f.sp.hordei, disease resistance induction, Erysiphe graminis f.sp.hordei incompatibility races 1362
powdery mildew, Erysiphe graminis f.sp.hordei, simulations 8554
powdery mildew, Erysiphe graminis f.sp.hordei, virulence gene frequency 5041
powdery mildew, fungicides disease control 9489
powdery mildew, pathogenicity, microscopy, X-ray diffraction 6775
powdery mildew, spores dispersal, spring, Denmark 2127
Pseudomonas syringae pv.syringae spot, etiology 4970
Puccinia hordei leaf rust, disease resistance, association colonies abortion 4057
rhabdovirus infection 2118
root rot, planting density effects on, Cochliobolus sativus 7674
roots, coleoptile, Rhizoctonia solani, penetration 2132
roots, Erysiphe graminis infection 355
roots growth, translocation, water stress, powdery mildew, Erysiphe graminis f.sp.hordei 3939
rust, interaction, barley yellow dwarf virus, Puccinia hordei, pathology 344

Hordeum vulgare, (continued)

seed treatments, leaf stripe, *Pyrenophora graminea* 1435.
 seed treatments, use, phenylmercuric acetate, effects on *Fusarium nivale* infection 8645.
 seeds, heat treatments, disease control, *Pyrenophora graminea*, *Pyrenophora teres* infection 1430.
 spot, *Pyrenophora teres* f.sp. *maculata* 5703.
 varieties, disease resistance, powdery mildew, mechanisms 4089.
 viruses infection, guanidine treatment 1198.
 wounds, ethylene production, *Drechslera graminea* infection 1183.
 yield, powdery mildew, disease control, models 7671.

leaf blotch, *Rhynchosporium secalis* 5730.

Hormones,

P-factor, penicillium cyclospium 3705.
 mutants, *Triticum aestivum*, yield, relationship, *Azospirillum* inoculation 5944.

Horrea,
 bacteria isolation, media (selective), contagious equine metritis 862.
 leukocytes (mononuclear), herpesvirus (equine) infection, detection assays 3535.

Hospitals,

antiseptics, bacteria disinfection 5347.
 antiseptics, bacteria disinfection 5348.
 bacteria isolates, antibiotic resistance 8732.
 bedding, bacteria contamination 1731.
 clinical isolates, *Escherichia coli*, *Staphylococcus aureus*, drug resistance, mercury 662.
 disinfectants antibacterial activity 4459.
 disinfection, germicides 9821.
 isolates, *Staphylococcus aureus*, antibiotic resistance, gentamicin, methicillin, plasmids role, Eire 7032.
 laundry, washing, water temperature effects on bacteria 3498.
 Legionella pneumophila colonization, relationship hot water temperature 8972.
 Legionella pneumophila eradication, ozone use 4460.
 man, disinfection, association, nosocomial infection 3508.
 man, respiratory tract isolates, *Aspergillus flavus*, airborne microorganisms, relationship, buildings, construction 3493.
 personnel, environmental hygiene, operating theaters 803.
 relationship gram-negative bacilli drug resistance 8737.
Staphylococcus aureus isolation, antibiotic resistance, antibiotic sensitivity testing 8980.
 treatment pools+U.V. radiation, microflora, incidence, Naegleria 798.
 wastes, waste disposal, hygiene, infectious diseases 799.
 water isolates, Legionella longebachae, Legionella pneumophila, Europe 6283.
 water supplies, contamination, Legionella pneumophila 1719.

Host plants,

Arctium lappa, tobacco ringspot virus 6823.
 brome mosaic virus, British Isles 3960.
 cell recognition, Rhizobiaceae, host range, association, plasmids 5937.
 Circulifer tenellus feeding, vectors, disease transmission, *Spiroplasma citri* 4920.
 genotypes, effects on urediniospores, Puccinia arachidis inoculation, Arachis hypogaea 5683.
 mycorrhizas infection, ultrastructure, cytology 9536.
 Phomopsis, Amaranthus spinosus, Leonotis nepetifolia, Leonurus sibiricus, new records, Brazil 6826.
 roots, nutrient transport, physiology, vesicular-arbuscular mycorrhizas 9537.
 Sclerotinia, virulence, Xanthium pensylvanicum 5753.

Host range,

Agrobacterium tumefaciens agrocin, purification, biological control, crown gall 4716.
 Agrobacterium tumefaciens, crown gall, plant cells binding 2977.
 alfalfa mosaic virus, plant diseases, Lycium 3085.
 Ascomycetes, India 7645.
 barley yellow dwarf virus, Gramineae 1155.
 bean yellow mosaic virus infection, Vicia faba 1128.
 brome streak mosaic virus, Gramineae 7666.
 carlavirus infection, Solanaceae 408.
 cassava common mosaic virus, disease transmission, Manihot esculenta 1232.
 Coleotrichum trifolii, Leguminosae 1139.
 comovirus, pathogenicity, crops 2172.
 Conidiocarpus pengizi infection, plants, pathogenesis 3992.
 Eutype armeniaca, plants, Australia 3900.
 R factors, man, normal subjects 7882.
 Heterobasidion annosum, Pinus ponderosa, Abies concolor 4168.
 hop latent virus infection, Humulus lupulus 3037.
 Hungarian Datura innoxia mosaic virus infection, Solanaceae 3077.
 maize chlorotic mottle virus, Gramineae 4949.
 maize streak virus, Gramineae 6778.
 mung bean yellow mosaic virus, Thailand 6813.
 okra mosaic virus, plants 3905.
 Peronosclerospora philippinensis, comparison, Peronosclerospora sacchari, Gramineae 6753.
 Peronosclerospora sorghi, downy mildew, Gramineae 5700.
 Phytophthora megasperma, morphology, pathogenicity 3904.
 Phytophthora cinnamomi infection, callose, formation, plants 3901.
 plant diseases, alfalfa mosaic virus, New Zealand 9317.
 plant viruses, plants, New Zealand, arabis mosaic virus, tomato spotted wilt virus 6731.
 Pseudomonas solanacearum, wilt, Solanaceae 2232.
 Pseudomonas syringae pv. tagetis, chlorosis, Compositae 1304.
 Rhizobiaceae, plasmids, association, host plants cell recognition 5937.
 Rhizobium japonicum, nodulation, cultivars, Glycine max 7841.
 rice tungro virus, Oryza, Nephrotettix virescens, Nephrotettix nigripictus vectors 4951.
 rice yellow mottle virus, Gramineae 8555.
 Septoria nodorum, spore germination, pathogenicity, Triticum aestivum, Hordeum vulgare 3019.
 specificity, Rhizobium, association Trifolium repens nitrogen fixation 602.
 tobacco mosaic virus, Gesneriaceae 9421.
 tobacco mosaic virus, plants, association defoliation 4024.
 tobacco streak virus infection, Helianthus annuus, pathology 9430.
 tobacco streak virus, isolation, Solanum tuberosum 1290.
 tobacco streak virus, isolation, Solanum tuberosum 2197.
 Transzschelia discolor, rust, sporulation, Prunus domestica subsp. domestica, Prunus domestica subsp. insititia 3967.
 turnip mosaic virus 2179.

Host range, (continued)

turnip mosaic virus, cauliflower mosaic virus, immunodiagnosis 4983.
 watermelon mosaic virus 2, Jordan 1247.
 white clover mosaic virus strains 2995.
Host specificity,
 bacteria, wilt, Gramineae 359.
 Ceratocystis fimbriata, spores, agglutination, extracts, Ipomea batatas, roots 3095.
 Erwinia amylovora amylovorin, Cotoneaster pannosa, spiraea vanhouttei, Malus pumila 9371.
 Puccinia menthae infection, Mentha, rust, pathogenicity 431.
 Rhizobium japonicum symbiosis, Glycine max 2369.
 tobacco streak virus infection, plants 1126.
 yeasts, isolation, trees exudates 2295.
Host-parasite interactions,
 Botrytis cinerea, grey mold, ultrastructure, role aromatic compounds production, fruits, Vitis vinifera 9402.
 Helminthosporium maydis, Helminthosporium carbonum, etiolation, seedlings, Zea mays 3015.
 Myxobacter, Micrococcus luteus, survival, soil 9569.
 nematophagous fungi, Panagrellus redivivus 9550.
 Pseudomonas replication, Nicotiana tabacum, factors affecting 5816.
 purines biosynthesis, bredinin antimalarial activity, man 1589.
 Pyricularia oryzae, Oryza sativa phytoalexins, isolation, identification 6849.
Host-pathogen interactions,
 Aklonisia ligustrina, haustoria, xylem transport, Lorantheaceae 5790.
 Cochliobolus carbonum inoculation, Zea mays 382.
 disease resistance, genetic factors, plants 468.
 Erysiphe graminis f.sp. hordei, haustoria, Hordeum vulgare 9347.
 Phragmidium violaceum rust, Rubus fruticosus, analysis methodology 9440.
 Phytophthora megasperma f.sp. glycine infection, Glycine max, disease resistance 8615.
 plant diseases, epidemiology, genetic factors, disease resistance, books 9998.
 plants 8185.
 Spiroplasma, plants 5665.
 tobacco mosaic virus, disease resistance, Nicotiana tabacum 2170.
 tobacco mosaic virus, tomato mosaic virus, ribgrass mosaic virus 2094.
 ultrastructure, Cronartium flaccidum infection, Pinus pinea, Pinus pinaster 5088.
Hot-boning,
 beef, abattoirs, bacteria contamination, cold storage 244.
Household products,
 disease transmission, rhinovirus, man 804.
House,
 contamination pathogens, bacteria 4500.
Housing,
 pigs, dust, endotoxins, fungi, bacteria 7638.
Hoya carnosae,
 leafspot, Myrothecium rostratum 5747.
Human impact,
 motor vehicles, tundra soil, arylsulfolatase activity, soil moisture, USA, Alaska 6951.
 trampling, soil microorganisms, population levels, forests 4133.
Humic acids,
 decomposition, soil microorganisms 1476.
 +1-d complex, mineralization, complex, mineralization, microorganisms 4745.
 Micrococcus luteus cell walls interaction, effects on lysozyme activity 590.
 oxidation, fungi, soils (organic) 5925.
 peat biodegradation, anaerobic conditions 9264.
Humicola fuscoatra,
 lignin biodegradation, Pinus, straw 171.
Humicola grisea,
 chemotaxis, association, wood volatiles 3765.
Humicola insolens,
 post-harvest decay, tobacco leaves, association storage 6599.
Humicola lanuginosa,
 cellulase, purification, characterization 8258.
 lignocellulose biodegradation 6641.
Humidity,
 chambers, fungi pathogens, foliage 4523.
 Colletotrichum graminicola, Helminthosporium maydis, spores, application, Zea mays, leaves, methodology 9081.
 effects on, carbon dioxide, production, soil microorganisms 577.
 effects on, oleandomycin phosphate crystallinity 8862.
Humification,
 plants, soil amendment 2324.
Humulus,
 Verticillium infection, pathogenesis, susceptibility 2193.
Humulus humul,
 downy mildew, Pseudoperonospora humuli, epidemiology, weather 3087.
Humulus lupulus,
 cytology, hop stunt virus infection 3039.
 downy mildew, Pseudoperonospora humuli, disease control, fungicides 1403.
 hop latent virus infection, host range, purification, characterization 3037.
 hop stunt disease virus, cytopathology 6797.
 hop stunt disease virus infection, localization, leaves cells 313.
Humus,
 Oxycteleida, ecological distribution, forest floor 5849.
 forest floor, thiosulphate sulphurtransferase activity, soil microorganisms 7777.
 formation, soil, role melanins, Coprinus, chemical composition 9218.
 phosphate complex, actinomycetes, fungi, nutrient availability, fertilization, agricultural land 9625.
 soil properties, pollution, effects on, lead, enzymatic activity, metabolism 2326.
Hungarian Datura innoxia mosaic virus,
 infection, cytology, host range, Solanaceae 3077.
Hungary,
 Diaporthe phaselorum var. sojae infection, Phomopsis sojae, new records 7657.
 Triticum aestivum, stem rust, disease resistance 7735.
 Zea mays, maize dwarf mosaic virus infection, disease resistance 7745.
Hyalophora cecropia,
 acropin, antibacterial activity, Escherichia coli 1551.
Hyaluronic acid,
 effects on lipoxigenase biosynthesis, Pseudomonas 7412.
Hybridization,
 DNA, measuring techniques, Triticum stem rust disease resistance 449.
 DNA, methodology, Yersinia enterocolitica detection enumeration, food

Hybridization, (continued)

contamination 9049.
 Saccharomyces cerevisiae, protoplast fusion, genetic engineering, association, ethanol production 8402.
 selection, yeasts pure culture, wine fermentation, sulfur dioxide tolerance 147.
 yeasts, pure culture, wine production 140.

Hybridization analysis,

detection, enterotoxins, *Escherichia coli* 4903.
 detection, tobacco rattle virus, *Solanum tuberosum* tubers, *Narcissus* 6808.
 methodology, plant viruses, *Vicia faba* tissues 9665.
 methodology, RNA 5'-terminus, plant viruses 9867.
 nucleic acids, antiviral agents activity measurement, cytomegalovirus DNA biosynthesis 8798.
 viruses, DNA, RNA, detection, plant cells 6299.

Hybridoma,

monoclonal antibodies production, *Bacillus thuringiensis* δ -endotoxin 305.

Hybrimycins,

mass spectroscopy 5244.

Hydrangea,

diagnosis, infection, *Mycoplasma*-like organisms, viruses 2185.

Hydrangea macrophylla,

association weeds, tomato spotted wilt virus detection 5016.

Hydrazine,

bacterial activity, *Enterobacter cloacae*, kinetics 9677.
 derivatives, *Basidiomycetes* metabolism, toxicity, mutagenicity, *Salmonella typhimurium*, correlation, animals 1095.

3-Hydroxy-2-naphthol,

synthesis 4390.

Hydrocarbons,

derivatives, antibacterial 2561.
Hydrocarbon-degrading bacteria,
 amino acids production 8195.
 benzothiohenes, dibenzothiohenes, biodegradation, oil dispersants effects on 8717.
 freshwater environments, hydrocarbons emulsification 5143.

Hydrocarbons,

aromatic compounds, biodegradation, *Cunninghamella elegans*, bacteria 3263.
 compounds, metabolism, microorganisms, estuaries sediments 5145.
 Beijerinckia, biodegradation, plasmids association 5144.
 biodegradation, *Mycobacterium* 7869.
 biodegradation, sediments, oil installations, marine environment 2392.
Candida guilliermondii cell walls, effects on high molecular weight glycoproteins 7668.

conversion, *Pseudomonas oleovorans*, epoxides production association 9631.
 degradation, hydrocarbon-degrading bacteria, amino acids production 8195.
 emulsification, hydrocarbon-degrading bacteria, freshwater environments 5143.
 gas production, anaerobic conditions, soil microorganisms, soil types 9567.
 hydrocarbons, *Arthrobacter simplex* single-cell protein, nutritive value, rats 7597.

oxidation, methylotrophic bacteria 5146.
 production, anaerobic bacteria, cattle feces fermentation 5138.
 production, *Zymomonas mobilis*, glucose conversion 4261.
Pseudomonas, emulsifiers, solvents 9632.
Pseudomonas oleovorans, conversion, characterization, methodology 8720.

single-cell protein production, fungi 4769.
 utilization, amino acids production, soil microorganisms 7284.
 utilization, *Candida guilliermondii* 7866.
 utilization, factors affecting, *Lodderomyces elongisporus* continuous culture 4264.
 utilization, *Pseudomonas aeruginosa* 7021.

utilization, valine production, *Micrococcus* variants 7286.
 yeasts, gas chromatography, methodology 7271.
D-β-Hydroxybutyric acid,
 biosynthesis, *Candida rugosa* 5481.
Hydrocortisone,
 biosynthesis, cortisone hydroxylation, *Curvularia lunata* immobilized cells 3725.

Hydrocortisone-17- α -acetate,

Arthrobacter simplex, conversion prednisolone-17- α -acetate, conversion pregnenolone triacetate, *Flavobacterium dehydrogenans* 5529.
Arthrobacter simplex, conversion prednisolone-17- α -acetate, conversion pregnenolone triacetate, *Flavobacterium dehydrogenans* 5529.

Hydrocyanic acid,

production enzymes, *Pseudomonas*, fractionation methodology, column chromatography + detergents, anaerobic conditions 4505.

Hydrodictyon reticulatum,

+ Tetraselmis, mixed culture, environmental conditions effects on fermentation 2858.

Hydrodynamic,

adenosinetriphosphatase, fluorometry, thermophilic bacteria 1879.
 ribosomal protein L29, ribosomal protein L30 tertiary structure, *Escherichia coli* 1838.

Hydrogen,

tryptophan synthase quaternary structure, *Escherichia coli* 1871.
Hydrogen,
 biosynthesis, association, growth, *Citrobacter intermedius*, *Clostridium acetabutylicum* 124.
 gas production, *Enterobacteriaceae*, formate conversion 4708.
 gas production, relationship acetylene reduction, nitrogen fixation, *Rhizobium leguminosarum*, *Pisum sativum* 9585.
 gas production, *Trifolium repens*, nodulation, *Rhizobium trifolii* 3245.
 intermediates, organic matter biodegradation, bacteria 2011.
 metabolism, *Glycine max*, nodules, *Rhizobium japonicum* 6979.
 methane, fermentation, straw + food wastes substrates 5595.
 oxidation, hydrogenase, soil moisture, soil 5917.
 production, immobilized cells, *Clostridium butyricum*, glucose 1976.
 production, microorganisms, immobilized cells, reviews 6607.
 production, recycling, *Rhizobium japonicum* nitrogen fixation, *Leguminosae* 5936.
 production, *Rhizobium*, nutrient dynamics, carbon, nitrogen, *Vigna unguiculata* 4247.

production, *Rhodospseudomonas* 125.
 production, *Rhodospseudomonas capsulata*, carbon sources, lactic acid, acetic acid, butyric acid 7469.
 production, *Rhodospseudomonas capsulata*, substrates, lactic acid, acetic acid, butyric acid 8386.

production, *Rhodospseudomonas sphaeroides*, batch culture 1980.
 production, *Rhodospirillum rubrum* illumination, nitrogen sources analysis 8366.

Hydrogen, (continued)

recycling, *Rhizobium leguminosarum*, symbiosis, *Pisum sativum*, effects on nitrogen fixation 3229.
 release, *Cajanus cajan* nodules, *Rhizobium japonicum* nitrogen fixation 7858.
 uptake, *Rhizobium japonicum*, *Glycine max* nodules, effects on nitrogen fixation 7007.
 uptake, *Vigna mungo* *Rhizobium*, relationship, nitrogen fixation 7002.

Hydrogen bacteria,

activity, population dynamics, relationship, flooding, oil deposits 2387.
 carbohydrates metabolism pathways, tricarboxylic acid cycle, enzymes 123.
 2-methylthio-1,4-naphthoquinone structure 6619.

Hydrogen cyanide,

production, bacteria, detection methodology 3567.

Pseudomonas contamination, fungi cyanogenesis assays 3556.

Hydrogen dehydrogenase,

Alcaligenes eutrophus, + lactate dehydrogenase, immobilized enzymes, use, NADH regeneration 8314.

Hydrogen peroxide,

antibacterial activity, antifungal activity 7088.
 antibacterial activity, *Bacillus cereus* spores, dimethyl sulfoxide, EDTA, effects on 8772.
 effects on chemical separation, mercury, aquatic environment 1516.
 formation, phosphates buffers, electric currents, cytotoxicity, *Escherichia coli* 2451.

preservatives, antifungal activity, *Candida*, contact lenses 709.
 reaction hydroxylamine oxidase home P-450, mechanisms, *Nitrosomonas europaea* 8282.
 sanitizers, sterility, medical equipment 5227.
 + sodium bicarbonate, effects on oral microflora, periodontitis, man 5353.
 + sodium chloride, dental plaque, man, toothbrushing comparison 8075.
 + thiocyanate + lactoperoxidase effects on cheese fermentation 4809.
 + thiocyanic acid, preservation fermented milk products, spoilage, psychrotrophic bacteria 6685.

Hydrogen sulfide,

biosynthesis, *Enterobacteriaceae*, differentiation media 6603.
 cheese flavor, ripening, Cheddar cheese 9272.
 conversion, *Chlorobium limicola* 13p, thiosulfatophylum 2894.
 detection, identification, *Enterobacteriaceae* 6311.
 production association bacteria biodegradation oil pipelines, Canada 7018.
 production detection, fecal microflora, microbial pollution, drinking water 3478.

Hydrogenase,

activity, bioassays, bacteria 6336.
 activity, *Rhizobium japonicum*, screening 3578.
 activity, *Rhizobium*, nodules, *Leguminosae* 7837.
Bacillus schlegelii, isolation, purification, characterization 4670.
 bacteria, activity, immobilization, applications, reviews 9169.
 E.S.R., *Desulfovibrio* gas 74.
 hydrogen oxidation, soil 5917.
 kinetics, assays, *Desulfovibrio* gas 7389.
 pH, redox potential effects on activity, *Clostridium pasteurianum* 5492.
 purification, characterization, cell membranes, *Desulfovibrio desulfuricans* 4611.
 purification, characterization, *Vibrio succinogenes* 51.
 redox properties, E.S.R., Mossbauer spectroscopy, *Desulfovibrio* gas 4634.

Hydrogenation,

aldehydes, *Clostridium*, immobilized cells 10.

Hydrolyase,

peptides, lactobacilli, production, factors affecting 1941.
 tummy, fermentation, regulation 8038.

Hydrology,

Escherichia coli, coliforms, microbial pollution, rivers 1724.

Hydrolyzates,

Pinus radiata, *Populus tremuloides*, use, *Pachysolen tannophilus*, ethanol production 8411.

Pinus radiata, use, *Clostridium acetobutylicum*, 1-butanol production 8390.

wood, acids, ethanol fermentation, *Saccharomyces cerevisiae* 4734.

Hydrolysis,

1-acetoxy-2,3-dichloropropane, asymmetry, bacteria, yeasts, molds 158.
 animal wastes, 4-proxids, inhibition, yeasts, growth 4305.
 association, straw biodegradation, rumen microorganisms 4751.
 cellobiose, salicin, *Trichoderma*, immobilized cells, β -glucosidase 3791.
 cellulose, cellobiose dehydrogenase, *Chaetomium cellulolyticum* 8253.
 cellulose, cellulase, *Aspergillus aculeatus* 3699.
 cellulose, cellulase, *Trichoderma* viride 8318.
 cellulose, *Clostridium acetobutylicum*, *Klebsiella pneumoniae*, fuels production 2018.
 cellulose, ethanol production, *Penicillium funiculosum* + *Saccharomyces uvarum* 8401.
 cellulose, kinetics, cellulase, *Trichoderma viride*, *Trichoderma reesei*, *Aspergillus niger* 3789.
 cellulose, *Trichoderma reesei* cellulase, kinetics 9154.
 cellulose, *Trichoderma reesei* enzymes activity 1056.
 collagen, factor affecting, actinomycetes soil isolates 7562.
 endo-polygalacturonase characterization, *Trichosporon penicillium* 91.
 enkephalin, *Pseudomonas*, *Chromobacterium violaceum*, enzymatic activity, bestatin analogs effects on 7551.
 gelatin, proteinase, *Aspergillus sojae*, carbon sources, nitrogen sources 6309.
 hemocellulase, *Trichoderma reesei* cellulase 9157.
 hemocellulose, biomass conversion, percolation reactors, mathematical models 9194.
 hemocellulose, *Klebsiella pneumoniae*, production, 2,3-butanediol 3739.
 inulin, *Cynara scolymus*, *Cluyveromyces fragilis* inulinase characterization 71.
 inulin, 2,1- β -D-fructan fructanohydrolase, *Pichia polymorpha*, immobilized cells 6495.
 β -lactamase, *Morganella morganii*, cephalosporins, derivatives, structure-activity relationships 5241.
 lactose, whey, β -D-galactosidase 8471.
 malathion, *Arthrobacter*, enzymes, characterization 8416.
 oleuropein, products antibacterial activity, *Lactobacillus plantarum* 7925.
 parathion, soil, mole, *Bacillus*, *Arthrobacter* 160.
 parathion, soil, role, soil microorganisms 155.
 pentosans, slimes systems 9262.
 polyoxyethylene sorbitan monooleate, esterase, purification, characterization, *Mycobacterium smegmatis* 8265.
 starch, exo-1,4- α -D-glucosidase, *Trichoderma* viride 6499.
 starch, oxo-1,4- α -D-glucosidase, *Endomycopsis fibuligera* 6498.
 starch, *Schwannomyces alluvius*, depression mutants 8452.
 sucrose, glucose, effects on, *Zymomonas mobilis* 6654.

Hydrolysis, (continued)

- sucrose, immobilized enzymes, bioreactors 9265.
sucrose, *Saccharomyces cerevisiae*, immobilized cells 3827.
sugar, *Aspergillus niger* polygalacturonase 4684.
sugar beets cellulose, *Talaromyces emersonii* cellulase 9153.
Trichoderma reesei cellulase, *Helianthus annuus* seeds coats, autohydrolysis-explosion pretreatment effects on 9136.
Tween 80, mycobacterium esterase, purification, physicochemical properties 8259.
wood pulp, *Trichoderma reesei* cellulase 9256.
- Hydrophobic interaction chromatography**,
phosphoenolpyruvate carboxylase purification, *Escherichia coli* 965.
- Hydrophobicity**,
poliovirus, adsorption, filters, salts effects on 3469.
- Hydroponics**,
culture, *Gigaspora margarita*, mycorrhizas, *Trifolium repens* 2716.
glycine max, factors affecting, *Phytophthora megasperma* var. *sojae* infection 349.
- Hydroquinone**,
biodegradation, fungi, bacteria, yeasts, activated sludge 8427.
- Hydroxy acid**,
production, bacteria, soil microorganisms 2743.
- Hydroxy-D-nicotine oxidase**,
assays, *Escherichia coli*, *Anthrobacter oxidans* 6531.
- Hydroxy-kaurenoide**,
biosynthesis, *Gibberella fujikuroi* 2853.
- Hydroxy-L-nicotine oxidase**,
assays, *Escherichia coli*, *Anthrobacter oxidans* 6531.
- Hydroxy-1-phenylpropanone**,
production, *Saccharomyces carlsbergensis*, pyruvate levels, pyruvate decarboxylase activity, effects on 7501.
- Hydroxy-2,4,6-trimethoxyphenanthrene**,
Dioscorea roundata extracts, antifungal activity 3339.
- Hydroxy-3-(3-methyl-2-butenyl)-4-naphthoquinone**,
antiviral activity 7106.
- 2-(3-Hydroxy-4-hydroxymethylphenyl)glycine**,
synthesis 3737.
- Hydroxy-4-methyl-2-ketoglutarate aldolase**,
purification, characterization, *Pseudomonas putida* 6429.
- Hydroxy-6-methoxycoumarin**,
production, 7-ethoxycoumarin biotransformation, *Streptomyces gneuse* 7493.
- Hydroxy-7-oxo-sandaracopimaradiene**,
phytoalexins, *Oryza sativa* host-parasite interactions, *Pycularia oryzae*, isolation, identification 5649.
- Hydroxyaciacinomylin A**,
synthesis, antitumor activity 8918.
- Hydroxyacyl-CoA dehydrogenase**,
isolation, substrate specificity, *Escherichia coli* 4589.
- Hydroxybenzoate 3-monooxygenase**,
adenosine nucleotides, *Cibacron blue*, phosphate, metals inhibition, *Pseudomonas fluorescens* 8275.
amino acid sequence, *Pseudomonas fluorescens* 7400.
tertiary structure models, *Pseudomonas fluorescens* 7402.
- apoenzymes**, purification, characterization, *Pseudomonas fluorescens* 954.
chemical modification, *Pseudomonas fluorescens* 1880.
- Hydroxybenzoic acid**,
radiosensitization, *Staphylococcus aureus* 5173.
- (α -Hydroxybenzyl)-benzimidazole**,
antiviral activity, tomato mosaic virus 7951.
- Hydroxycalamenene**,
Tilia europaea, detection, response, association, *Ganoderma applanatum* infection 6644.
- Hydroxycinnamic acid**,
esters, antibacterial activity, *Pseudomonas fluorescens*, physicochemical properties 2448.
- Hydroxycitric acid**,
enantiomers, citrate (pro-3S)-lyase inactivation, bacteria 7708.
- α -Hydroxycompactin**,
biosynthesis, *Mucor hiemalis*, compactin hydroxylation 8872.
- Hydroxycoumarin**,
Streptomyces, biosynthesis, antibacterial activity 4401.
- Hydroxycoumarin**,
production, 7-ethoxycoumarin biotransformation, *Streptomyces gneuse* 7493.
- Hydroxydecanoyl thioester dehydratase**,
purification, characterization, *Escherichia coli* 54.
- 6-Hydroxydeoxyerythritolsterone**,
Streptomyces roseochromogenes, hydroxylation 2815.
- α -Hydroxydihydroelludin**,
structure, *Citrocybe illudens* 3729.
- (2-Hydroxyethoxymethyl)guanine**,
-amphoteron B, antiviral activity, pseudorabies virus infection, BHK-21 cells 3351.
antiviral activity, cytomegalovirus 8796.
antiviral activity, herpes simplex virus infected cells, thymidine kinase activity 3363.
antiviral activity, herpes simplex virus infected fibroblasts, thymidine effects on 7942.
antiviral activity, herpes simplex virus, Vancella-zoster virus, Epstein-Barr virus 9697.
antiviral activity, herpesvirus 7099.
antiviral activity, herpesvirus, mechanisms, reviews 9696.
antiviral activity, inhibition, herpes simplex virus 1, herpes simplex virus 2, replication 7112.
antiviral activity, replication, herpesvirus 7940.
drug resistance, herpes simplex virus, mutation, thymidine kinase, DNA polymerase, genes 7674.
drug resistance, herpes simplex virus, reviews 9652.
drug resistance, herpes simplex virus 2 mutants 3271.
drug sensitivity testing assays, herpes simplex virus 1, herpes simplex virus 2 6575.
herpes simplex virus 1 infected cells, effects on protein biosynthesis 3366.
inhibition DNA biosynthesis, herpes simplex virus, cell culture 8795.
synergism, antiviral agents, antiviral activity, herpes simplex virus 1, herpes simplex virus 2 1572.
treatment, herpes simplex virus infection, trigeminal nerve ganglia, mice, effects on reactivation 7107.
vancella-zoster virus, cross-resistant, phosphonoacetic acid, bromodeoxyuridine

9-(2-Hydroxyethoxymethyl)guanine, (continued)

- 7897.
- 2-Hydroxyethyl methacrylate**,
immobilization, *Streptomyces phaeochromogenes* 9981.
- 6- α -Hydroxyethyl-2-acetoxyethyl-2-penem-3-carboxylate**,
antibacterial activity, *Staphylococcus* 1611.
- 8- β -Hydroxyisobutyric acid**,
Candida rugosa, mutants, production 4583.
- 2-Hydroxyjuglone**,
blast, *Oryza sativa*, effects on *Pycularia oryzae* pathogenesis 5827.
- Hydroxylamine**,
denitrification, *Alcaligenes*, nitric-oxide reductase, nitrate reductase, soil 596.
- Hydroxylamine oxidase**,
mechanisms, heme P-450 reaction carbon monoxide, hydrogen peroxide, *Nitrosomonas europaea* 8282.
- Hydroxylation**,
alkanes, alkenes, methylotrophic bacteria 4761.
4-androstene-3,17-dione, *Corynebacterium*, immobilized cells 6565.
bile acids, anaerobic bacteria 2892.
compactin, *Mucor hiemalis*, 3 α -hydroxycompactin biosynthesis 8872.
11-desoxy-17-hydroxycorticosterone, association, oxygen 4696.
18-hydroxydeoxyerythritolsterone, *Streptomyces roseochromogenes* 2815.
hydroxymethylglutaryl-CoA reductase (NADPH) inhibitor, *Zygomycetes*, *Nocardia* 8455.
Mucor hiemalis, compactin, monacolin K 7552.
proline, mutants, *Streptomyces gneuse*ovinus, vindogrisein analogs production 8911.
steroids, glucose, effects on, *Pellicularia filamentosa* 6564.
steroids, *Pellicularia filamentosa* 109.
steroids, use, microorganisms, reviews 7218.
- N-Hydroxycapthioisopropine**,
synthesis 5245.
- Hydroxymethylglutaryl-CoA reductase**,
Pseudomonas 8227.
- Hydroxymethylglutaryl-CoA reductase (NADPH)**,
purification, characterization, yeasts 8225.
- Hydroxymethylglutaryl-CoA reductase (NADPH) inhibitor**,
hydroxylation, *Zygomycetes*, *Nocardia* 8455.
- 3-Hydroxynaphthalene-2-carboxylaldehyde acids**,
-dipeptides derivatives, synthesis, antibacterial activity 8755.
- 7-N-(p-Hydroxyphenyl)intomycin C**,
antiviral activity, phages inactivation, effects on DNA 1581.
- 3-Hydroxypropionaldehyde**,
production, *Lactobacillus*, comparison, *Klebsiella pneumoniae* 8374.
- β -Hydroxypropionic acid**,
production, *Candida rugosa* mutants 5474.
- N-(2-Hydroxypropyl)-methacrylamide**,
copolymers synthesis, antibacterial activity, *Staphylococcus aureus* 7913.
- 8-Hydroxyquinoline**,
effects on *Saccharomyces invertase* biosynthesis 9184.
- α -Hydroxysteroid dehydrogenase**,
purification, characterization, *Lactobacillus xylosum* 5525.
- 12 α -Hydroxysteroid dehydrogenase**,
substrate specificity, *Eubacterium lentum*, *Clostridium* 1873.
- 3 α -Hydroxysteroid dehydrogenase**,
-bacteria luciferase, bioassays, bile acids 9020.
Pseudomonas testosteroni, bioassays, bile acids 4504.
substrate specificity, *Pseudomonas testosteroni* 1873.
- 6-Hydroxysteroid dehydrogenase**,
purification, characterization, *Peptostreptococcus productus* 2776.
- 7-Hydroxysteroid dehydrogenase (NADP⁺)**,
Peptostreptococcus productus, *Eubacterium aerofaciens*, purification, characterization 958.
- Hydroxystreptomycin**,
production, *Streptomyces glaucosens* 4382.
- 3-Hydroxytetradecanoyl**,
substitution, *Bordetella pertussis* endotoxins 6704.
- β -Hydroxytiolesters**,
derivatives, antibacterial activity 8752.
- 16-Hydroxytrichoderma diene diols**,
isolation, *Myrothecium verrucaria* 6222.
- 7-Hydroxytropone**,
inhibition, *Bacteria aminoglycoside 2'-O-adenylyltransferase*, association, antibiotic resistance 652.
- 16-Hydroxyverrucarin A**,
production, verrucarin A transformation, *Rhizopus arrhizus* 7503.
- 16-Hydroxyverrucarin B**,
production, verrucarin B transformation, *Rhizopus arrhizus* 7503.
- Hygiene**,
abattoirs, cattle, brucellosis 8072.
bacteria food contamination, prevention, intoxication, man 194.
bacteria infection, intestine, man, carriers, sanitation 7208.
control, dairy products, microorganisms food contamination 4846.
dental plaque, dental caries, bacteria, children 2642.
disinfection, water temperature, dishwashers 4455.
feeds, association mycotoxins contamination 4889.
food processing, seafood, food contamination, *Staphylococcus aureus* 3858.
hospitals wastes, infectious diseases, waste disposal 799.
kitchens, pasta, food poisoning, *Clostridium perfringens*, man 7576.
man, milk contamination, bacteria 5351.
meat industry, occupational exposure, sepsis, *Streptococcus*, man 2634.
milk products, membranes ultrafiltration, bacteria 4791.
milk processing machines, bacteria enumeration, direct apifluorescent filter technique 6270.
udder, relationship *Streptococcus*, *Staphylococcus*, mastitis, cattle 4453.
- Hygromycin B**,
antiviral activity, poliovirus, herpes simplex virus 2, HeLa cells 7947.
- Hygrophorus glycyclus**,
new records, soil, *Pinus leucoderms*, forests 7778.
- Hylocereus undatus**,
cactus virus X isolates characterization 5019.
- Hylobius**,
infestation, relationship air pollution sensitivity, *Verticillium procerum* infection, *Pinus strobus* 5866.

Subject Index

Hymenogaster,

mycorrhizas, *Eucalyptus* 1440.

Hypera poeica,

biological control, *Erynia* phyttonomi, koudie effects on 7485

Hyperomyza lactucae,

vectors, necrotic yellows virus, *Lactuca sativa*, detection, enzyme-linked immunosorbent assay 415.

Hyperparasitism,

Ampelesomyces quisqualis, biological control, *Sphaerotheca fuliginea*, powdery mildew, *Cucumis sativus* 2275.

Darfua filium, *Chrysomyxa abietis*, infection, *Picea abies* 7781.

Hypersensitive response,

agglutinins, *Glycine* max leaves, disease resistance, *Pseudomonas glycinea* 3128.

agglutinins, *Solanum tuberosum*, wilt, *Pseudomonas solanacearum* 3127.

blight, *Xanthomonas campestris* pv. *malvacearum*, *Gossypium hirsutum* 3129

Cladosporium fulvum infection, histopathology, *Lycopersicon esculentum* 1249.

disease resistance, tobacco mosaic virus, *Nicotiana tabacum* 1374.

disease resistance, tobacco mosaic virus, *Nicotiana tabacum* 3110.

leaves, viruses infection, *Gomphrena glabra* 2156.

Nicotiana tabacum leaves, *Pseudomonas pisi* infection, association mesophyll 462.

Nicotiana tabacum, *Pseudomonas pisi* infection 4980.

Nicotiana tabacum, tobacco mosaic virus, 2-chlorethylphosphonic acid, salicylic acid, effects on 4095.

Oryza sativa, induction, use, phytoalexins inducers seed treatments, disease resistance, *Drachlera oryzae* infection 2392.

Phaseolus vulgaris, leaves proteins, infection, *Colletotrichum lindemuthianum*,

alfalfa mosaic virus, peanut stunt virus 1333

Phytophthora infestans, sesquiterpene alcohols, alkaloids, tubers, *Solanum tuberosum* 3089.

Pseudomonas pisi, inhibition RNA biosynthesis, *Nicotiana tabacum* 5787.

Pseudomonas pisi, leaves ultrastructure, *Nicotiana tabacum* 6790.

role, disease resistance, *Phytophthora infestans*, *Solanum tuberosum* 3144.

Solanum tuberosum leaves, *Vectidulium albu-tomum* infection 3086.

tobacco mosaic virus, U.V. radiation effects on, *Phaseolus vulgaris* 3111.

tobacco mosaic virus, lignin biosynthesis, *Nicotiana tabacum* 4080.

tobacco mosaic virus, phospholipids, fatty acid composition, *Nicotiana tabacum* 741.

tobacco mosaic virus, proteins, *Nicotiana tabacum* 3081.

tobacco necrosis virus, proteins, *Cucumis sativus* 3113.

Hypersensitivity (delayed),

Legionella pneumophila, guinea-pigs, immunoassays, immunity (cell-mediated) detection 9937.

Hyphae,

Candida albicans, viability, methodology 7274.

cell walls, components, *Phytophthora infestans*, response, *Solanum tuberosum*, protoplasts 3098

Cochliobolus sativa, soil microorganisms colonization, fluorescence microscopy 3625.

Cronartium ribicola, inoculation, *Pinus lambertiana* hypocotyls, pure culture 542.

fungi, growth chambers 9988.

Rhizoctonia solani, extension, valdarmycin inhibition 1568.

structure, biochemical characteristics, *Glomus fasciculatum*, relationship, symbiosis, *Vitis vinifera* 4183.

Hyphal tips,

Colletotrichum lagenarium, tricyclazole effects on, pigmentation, plants penetration 325.

Hyphantria cunea,

dose-response effects, *Bacillus thuringiensis*, biological control, mathematical models 8362.

nuclear polyhedrosis virus infection, transmission, eggs, hatchability 1044.

Hyphodontia alutaria,

new records, soil, *Pinus leucodermis*, forests 7778.

Hyphomycetium,

alcohol dehydrogenase (acceptor), mechanisms, role pyrrole-quinoline semiquinone, R.S.R. 2789.

extracellular polymers, polysaccharides, carbohydrate composition 3710.

methanol utilization, polysaccharides biosynthesis 3709.

oxidation, benzaldehyde, characterization 2007.

Hyphomycetes,

biodegradation, lignin 3777.

cellulose, decomposition decomposition, cellulose, *Hyphomycetes* 2903.

culture, use biological control, *Insecta* 1806.

pectin biodegradation 3776.

pest control, biological control, *Insecta* 1003.

polygalacturonase, biodegradation, leaf litter 2003.

Quercus, *Pinus*, wood, extracts, inhibition, growth, spore germination 4180.

virulence, use biological control, *Insecta* 1004.

Hypocotyls,

Glycine max, lacase, infection, *Phytophthora megasperma* f.sp. *glycinea* 3916.

Glycine max, root rot, *Phytophthora megasperma* f.sp. *glycinea*, treatment, meta-xyl+phytoalexins 503.

Pinus lambertiana, *Cronartium ribicola* inoculation hyphae, pure culture 542.

rot, *Fusarium oxysporum*, etiology, *Pinus lambertiana* 4160.

tobacco necrosis virus infected, *Phaseolus vulgaris*, light, effect on 2992.

Hyposcyon avellanae,

biosynthesis, *avellanae* 6588.

Hyphomycetes rosellus,

cobweb disease, prochloraz, disease control, *Basidiomycetes* 6824.

Hypochoxyl atropunctatum,

canker, *Quercus* mortality, association drought 5074.

Hypochoxyl chesterii,

4-(4-methoxyphenoxy)buta-1,2-diene 2851.

Hypochoxyl mammatum,

canker, *Populus tremuloides*, forests 1464.

infection, *Populus tremuloides*, association, *Magiciada septendecim*, wounds 8658.

Hypochoxyl aspersa,

metabolites, 3-methoxy-4-methyl-5-prop-1-enylfuran-2(5H)-one, spectroscopy 7497.

Hyptis ausuelensis,

leaves oils, antifungal activity, *Helminthosporium oryzae* 494.

Hysterangium,

mycorrhizas, *Eucalyptus* 1440.

I.R. Radiation,

aerial photography, *Solanum tuberosum* blight detection 1252.

fungi, spores, counting methods, spectrophotometry 3634.

reflectance, analysis, fungi fermentation 9227.

sterilization, bran 5837.

use, carbon dioxide detection, bacteria food contamination 4851.

I.R. Spectroscopy,

bacteriorhodopsin photochemistry, purple membranes, *Halobacterium halobium* 4554.

bacteriorhodopsin, automeromycin 2826.

Nocardia restricta, lactamides, alkaloids 8373.

IBP,

biodegradation, flavoprotein-linked monooxygenase, *Pyrularia oryzae* 5590.

Ibuprofen,

inhibition, interferon antiviral activity 3346.

Ice,

crystals formation, identification, *Pseudomonas syringae* pv. *tomato*, *Pseudomonas syringae* pv. *syringae* 6310.

nucleation, frost damage, bacteria, plants 4130.

nuclei, activation, bacteria, cryoinjury, *Zea mays*, *Erwinia herbicola*, biological control 8643.

nuclei, activation, biological control, *Erwinia herbicola*, inhibition,

Pseudomonas syringae, cryoinjury, *Zea mays* 8642.

nuclei, formation, activity, smoke, effects on, *Pseudomonas syringae* pv. *syringae*, *Erwinia herbicola* 8527.

Ice cream,

food contamination, bacteria 238.

food contamination, quality control, food industry 259.

food contamination, *Staphylococcus aureus*, *Salmonella*, coliforms 6659.

food contamination, *Staphylococcus*, coliforms, psychrotrophic bacteria, yeasts 7557.

Lactobacillus acidophilus, health, man 4836.

production, pesticides contamination, microorganisms, association, radiation treatment 4838

Identification,

bacteria clinical isolates, counter immunoelectrophoresis, fluorescent antibody test, clinical microbiology 834

bacteria, clinical isolates, meningitis, gas-liquid chromatography 853.

bacteria, food contamination, gas chromatography 236.

Basidiobolus, *Conidiobolus*, enzymes, API test 899.

Campylobacter, taxonomy, keys, computer programs 843.

Clostridium difficile, gas-liquid chromatography 840.

Corynebacterium vaginale, vaginitis, man 888.

Enterobacteriaceae, API test, automated methods 859.

Enterobacteriaceae, API test, Micro-ID test 838.

Escherichia coli+pili, use, receptors specificity agglutination 880.

gram-negative bacteria, biochemical characteristics, API test, blood culture 839.

methodology, fungi antitoxins 898.

Neisseria gonorrhoeae, methodology 872.

Rhizobium strains, antibiotics use 887.

Rhodococcus, *Nocardia*, *Mycobacterium*, strains, use, sensitivity, bleomycin 671.

Shigella, *Salmonella*, automated methods 861.

Staphylococcus aureus, fibrinogen hemagglutination use 844.

tombusvirus, isolation, *Prunus*, comparison, *petunia* asteroid mosaic virus, tomato bushy virus 390.

Vibrio cholerae, fluorescent antibody test 842.

Idiocopus clypealis,

disease transmission, fungi, *Mangifera indica* 3022.

L-Iditol,

fermentation, *Candida* 9248.

L-Iditol dehydrogenase,

purification, characterization, cytoplasmic membranes, *Gluconobacter oxydans* subsp. *suboxydans* 4603.

Iliarvirus,

isolates, *Prunus*, *Malus*, association, mosaic disease, ringspot, dwarf disease 5740.

Ileum,

rabbits, *Escherichia coli* enterotoxins assays 310.

Ilex crenata,

black root, *Thielaviopsis basicola*, histology 4994.

Phytophthora infection, incidence, greenhouses 1282.

Illumination,

Rhodospirillum rubrum, hydrogen production, nitrogen sources analysis 8366.

Imanine,

disease control, cucumber mosaic virus infection, *Cucurbita* 9483.

Imazali,

treatment, *Penicillium digitatum* green mold, oranges, post-harvest decay 9452.

use, ornamental plants disease control 5056.

Imidazole,

derivatives+micronazole, antibiotic synergism, antibacterial activity,

Staphylococcus, *Propionibacterium* *acnes* 5182.

synergism, coplanicity, fungicidal activity, effects on membrane permeability 9679.

Imidazole acetyltransferase,

gluconmycin inhibition, *Bacillus subtilis* 8014.

Imidazole,

antifungal activity, *Candida albicans*, association endocarditis 7935.

antifungal activity, *Candida albicans*, spheroplasts, formation, scanning electron microscopy 3337.

antifungal activity, cell walls, *Candida albicans* 2477.

antifungal activity sterols demethylation, *Candida* 7936.

Candida plasma membranes, effects on potassium release 6061.

derivatives, antifungal activity, fungi 2480.

Immobolization,

Aerobacter *immobilis*, exo-maltotetraohydrolase, radiation methodology 9177.

Alcaligenes faecalis, polyacrylamide polymerization 9970.

α -amylase, exo-1,4- α -D-glucosidase, xylase isomerase, *Bacillus subtilis*,

Rhizopus, *Streptomyces fradiae*, use, *Sepharose-6MB* 9147.

Aspergillus awamori proteinase, role, silanes 1860.

bacteria hydrogenase, activity, applications, reviews 9169.

bacteria, methodology 8127.

Brevibacterium flavum, use, carrageenans, polyethyleneimine, association, malic acid production, fumarate hydratase activity 4494,

cells, methodology 7217.

Clostridium thermocellum, use, coal 5424.

enterovirus, bentonite, bacteria contamination, ethanol bactericidal activity 3523.

Immobilization, (continued)

- enzymes, albumen supports bactericidal activity 9668.
 β -D-galactosidase, polyacrylamide gels 9176.
 Saccharomyces ananensis, β -D-galactosidase purification methodology 901.
 Saccharomyces cerevisiae, β -D-fructofuranosidase activity, gels, methodology 4532.
 Saccharomyces cerevisiae, use, pectin, ethanol production association 6631.
 Streptococcus lactis, sepharose 6317.
 Streptomyces phaseochromogenes, radiation polymerization 9876.
 Streptomyces phaseochromogenes, 2-hydroxyethyl methacrylate 9981.
 Trichoderma reesei cellulase, glycoprotein composition 68.
 Trichoderma reesei, use, radiation polymerization 7262.
 use, poly(vinyl alcohol), Penicillium funiculosum, cellulase, β -D-glucosidase, exo-cellobiohydrolase 8315.
Immobilized cells.
 Alcaligenes faecalis, β -glucosidase activity 4585.
 Arthro bacter globiformis, Saccharomyces cerevisiae, steroids transformation 4697.
 Arthro bacter globiformis, 3-ketosteroid- Δ^1 -dehydrogenase activity 3688.
 Bacillus subtilis, biosynthesis, proinsulin 4582.
 Bacillus subtilis, viability 854.
 bacteria, fungi, transformation, steroids, reviews 3706.
 Brevibacterium ammoniogenes, coenzyme A biosynthesis, continuous culture 1944.
 Brevibacterium flavum, caragenanase, fumarate hydratase activity 7343.
 Brevibacterium flavum, fumarate hydratase stability, caragenanase gels 7344.
 calcium alginate, Lactobacillus vaccinostercus sp. nov., lactic acid biosynthesis 4565.
 Candida tropicalis, production, α,ω -dodecanedioic acid, α,ω -tridecanedioic acid 1840.
 Chlorella pyrenoidosa + Gluconobacter oxydans, glycerol conversion dihydroxyacetone 285.
 Clostridium acetobutylicum, metabolites production, control methodology 6583.
 Clostridium, aldehydes hydrogenation 10.
 Clostridium beijerinckii, fermentation, isopropanol + butanol + ethanol 9241.
 Clostridium beijerinckii, fermentation, 2-propanol, butanol, ethanol 4737.
 Clostridium butyricum, hydrogen, production, glucose 1976.
 Coriolus versicolor, pigments removal, pulp mills, industrial effluents 8959.
 Corynebacterium dismutans, alanine biosynthesis 9133.
 Corynebacterium glutamicum, glutamic acid biosynthesis 16.
 Corynebacterium, hydroxylation, 4-androstene-3,17-dione 6565.
 Desulphovibrio desulphuricans, beads, cytochrome C3 hydrogenase activity 4666.
 Enterobacter aerogenes, adenine arabinoside production 981.
 environmental effects, reviews 1737.
 Escherichia coli, glutathione production 118.
 Escherichia coli, L-aspartic acid biosynthesis, enzyme activity 4579.
 Escherichia coli, NADP⁺ recycling, glucose-6-phosphate dehydrogenase 4672.
 Escherichia coli, production, L-tryptophan, L-serine 9126.
 Escherichia coli, thymidine phosphorylase, activity 3694.
 fermentation, ethanol, reactors, mathematical models 3751.
 gels polymerization 9008.
 Gluconobacter oxydans, glucose metabolism kinetics, gluconic acid biosynthesis 5467.
 microorganisms, oxygen supply, hemoglobin, fluorine organic compounds 6286.
 microorganisms, production, hydrogen, ammonia, reviews 6607.
 Mycobacterium, ethylene oxide production, bioreactors 3262.
 nitrifying bacteria, electrodes, nitrogen dioxide detection 9055.
 nitrifying bacteria, electrodes, urea detection 1804.
 Nitrobacter, oxygen electrodes, use, sodium nitrite sensors 5430.
 Nitrosomonas europaea, nitrification 9063.
 Penicillium chrysogenum protoplasts, vesicles, penicillin G production 5242.
 Penicillium urticae, patulin biosynthesis 5261.
 Pichia polymorpha, 2,1- β -D-fructan fructano-hydrolase, hydrolysis, inulin 6455.
 Propionibacterium shermanii, nucleotides biosynthesis 113.
 Propionibacterium, thiamin production 4725.
 Providencia, α -keto- γ -methyl butyric acid production 1845.
 Pseudomonas putida, biodegradation, caffeine, characterization 1065.
 Rhizopus stolonifer, progesterone hydroxylation 4541.
 Rhodococcus mucilaginosus, benzaldehyde conversion, benzyl alcohol production 8440.
 Saccharomyces cerevisiae, acetaldehyde biosynthesis, ethanol biosynthesis 131.
 Saccharomyces cerevisiae, alcohol dehydrogenase, NADH regeneration 4601.
 Saccharomyces cerevisiae, biomass measurements, fermentation 7261.
 Saccharomyces cerevisiae, cellulose, films, ethanol, production 6632.
 Saccharomyces cerevisiae, ethanol biosynthesis, glucose fermentation 137.
 Saccharomyces cerevisiae, fixation materials methodology 4513.
 Saccharomyces cerevisiae, glycerol biosynthesis 127.
 Saccharomyces cerevisiae, growth distribution, analysis methodology 9087.
 Saccharomyces cerevisiae, hydrolysis, sucrose 3827.
 Saccharomyces cerevisiae, methodology 4537.
 Saccharomyces cerevisiae, reactors, ethanol production 3743.
 Saccharomyces uvarum, ethanol production 6634.
 steroids conversion, reviews 3707.
 streptomycetes, mycelia, production, tyrosin, nikkomycin 1665.
 Streptomyces phaseochromogenes, enzymes activity, drying 9064.
 Streptomyces viridochromogenes, uranium bioaccumulation, sea water 4258.
 technology, catalysts, fermentation 7337.
 Trichoderma, β -glucosidase, hydrolysis, cellobiose, salicin 3791.
 Xanthomonas citri, use, cephalaxin synthesis 9749.
 yeasts, carbon dioxide inhibition ethanol production 8397.
 yeasts, fermentation, beer 3745.
 yeasts, polymers adsorption, ethanol yeasts 7521.
 Zymomonas mobilis, levan production, association, sucrose fermentation 9192.
 Zymomonas mobilis, resins, use, bioreactors, ethanol production 9250.
 Zymomonas mobilis, Saccharomyces bayanus, ethanol fermentation, by-products 8396.
Immobilized enzymes.
 activity, factors affecting kinetics 8306.
 Alcaligenes eutrophus hydrogen dehydrogenase + lactate dehydrogenase, use, NADH regeneration 8314.
 α -amylase, Aspergillus oryzae, Bacillus subtilis, exo-1,4- α -D-glucosidase, Aspergillus niger 48.
 α -amylase, exo-1,4- α -D-glucosidase, Aspergillus awamori, var. kawachi, glucose production 6305.
 Bacillus circulans, β -D-galactosidase, activity, physicochemical properties 5315.
 Bacillus intermedius ribonuclease, kinetics, use oligonucleotides synthesis 8284.

Immobilized enzymes, (continued)

- Bacillus subtilis, α -amylase, activity, association, starch, non-linearly 9134.
 biosynthesis, quantification methodology 6492.
 chitin, α -amylase, Aspergillus awamori var. kawachi, starch biodegradation activity 106.
 cytochrome P448, Saccharomyces cerevisiae 1927.
 exo-1,4- α -D-glucosidase, α -amylase, β -D-fructofuranosidase, yeasts 2765.
 exo-1,4- α -D-glucosidase, physical properties, columns 7324.
 β -D-fructofuranosidase, heat inactivation, kinetics, Saccharomyces cerevisiae 9150.
 β -D-fructofuranosidase, yeasts 46.
 furanase, caragenanase use, Brevibacterium flavum 6472.
 fungi, disaccharides analyzers 7342.
 glucose oxidase, Aspergillus niger, heat inactivation 43.
 β -D-glucosidase, Aspergillus niger 48.
 β -D-glucosidase, Penicillium funiculosum, characterization 4584.
 glutamate decarboxylase, Escherichia coli, preparation, characterization 1855.
 glyceraledehyde-phosphate dehydrogenase, subunits association kinetics, yeasts 4693.
 kinetics 6402.
 methodology 4619.
 methodology, use propylene glycol alginate acid 6557.
 microbiology methodology 7391.
 penicillin amidase, Proteus rettgeri 1893.
 penicillin V acylase, kinetics 7326.
 polydioxynobionitride synthetase (ATP), phage T4, DNA fragments ligation 2755.
 proteinase, hydrolysis, Streptomyces fradiae 6482.
 reviews, recommendations 8311.
 ribonuclease, yeasts 1907.
 steroids conversion, reviews 3707.
 Streptomyces griseus, proteinase, probes, lysozyme, casein 61.
 Streptomyces griseus, proteinase, stability, urea denaturation 63.
 sucrose hydrolysis, bioreactors 9265.
 surface charge effects on reaction mechanisms 967.
 technology, catalysts, fermentation 7337.
 Thermus thermophilus malate dehydrogenase, yeasts formate dehydrogenase 50.
 triacylglycerol lipase, Candida cylindracea, triacylglycerides hydrolysis 5501.
 use egg shells carrier, β -D-galactosidase, Lactobacillus bulgaricus 9138.
 yeasts, alcohol dehydrogenase activity, bioreactors 7361.
Immune adherence hemagglutination.
 antibodies detection, measles virus 8093.
 detection, adenovirus antigens 9846.
Immune response.
 food-microbial disease virus vaccines, DEAE adjuvants, pigs 2600.
 gastrointestinal tract, Candida utilis single-cell protein, feeding trials, pigs 2929.
 microflora, relationship, lactoferrin, transferrin, conalbumin antibacterial activity, Mamalia, reviews 5176.
Immune serum.
 immunoglobulin G antibody response Bacillus anthracis, enzyme immunoassay detection, rabbits 855.
Immune state.
 determination, rubella, hemagglutination inhibition, immunofluorescence, latex agglutination, man 9842.
 rubella virus serum antibodies, comparison, enzyme-linked immunosorbent assay, indirect hemagglutination, hemagglutination inhibition 9837.
Immunity.
 Bordetella bronchiseptica vaccines, preparation, immunogenicity, dogs 785.
 Newcastle disease virus vaccines, chickens 1687.
 parvovirus (canine) vaccines, antibody response, dogs 2599.
Immunity (cell-mediated).
 guinea-pigs, Legionella pneumophila hypersensitivity (delayed), detection, immunosays 9937.
Immunoabsorption.
 chromatography, purification, Escherichia coli acyl carrier protein 8193.
 use, Staphylococcus aureus, association, isolation methodology, Langerhans cells 5395.
 Staphylococcus aureus, use, coated vesicles isolation 884.
Immunoassays.
 E.S.R., detection, antibodies, Neisseria meningitidis, methodology 9966.
 detection, bacteria antigens, expression 9874.
 detection, immunoglobulin G, cytomegalovirus 5375.
 detection, microorganisms, pathogens, insects 1736.
 fluorescence, dibekacin 9785.
 fluorescence, monoclonal antibodies, gentamicin 9763.
 fluorescence polarization, streptomycin 6156.
 fluorescence, vancomycin 9784.
 identification fungi, pathogens, reviews 8165.
 identification fungi, pathogens, reviews 8165.
 interferon, antiviral activity, vesicular stomatitis virus 9698.
 Legionella pneumophila hypersensitivity (delayed), guinea-pigs, immunity (cell-mediated) detection 9937.
 leprosy, Mycobacterium leprae, epidemiology, man 846.
 radiometry, detection poliovirus antibodies 1758.
 reviews, bacteriology, antibiotics use 1604.
 Saccharomyces carlsbergensis proteinase, beer 7322.
 solid phase methods, use, detection, hepatitis B surface antigen antibodies 4470.
 Streptococcus group B 6327.
Immunochemistry.
 Escherichia coli enterotoxins, subunit structure 291.
Immunodiagnosis.
 fluorescent antibody test, syphilis 9918.
Immunodiffusion.
 detection, plant viruses, Triticum aestivum, Hordeum vulgare 6757.
 identification, Blastomycosis dermatitis, Coccidioides immitis, Histoplasma capsulatum 5543.
 Pseudomonas syringae pv. tomato, serotypes, identification 5385.
 pseudorabies virus antibodies detection, pigs serum 5374.
 Staphylococcus aureus enterotoxins detection 6710.
 use, enterotoxins characterization, Escherichia coli, Vibrio cholerae 7634.

Immunoelectrofocusing, quantitation, hepatitis A virus, infected cell culture 9652.

Immunoelectron microscopy, detection, antigens, mycoplasma-like organisms, yellows, *Callistephus chinensis* 8597.

enterovirus, isolation, sewage 3468.

use, assays, poliovirus, hepatitis A virus 4476.

use, plants viruses, detection, identification 4926.

wheat spindle streak mosaic virus infection, *Triticum aestivum*, detection 9353.

Immunoelectrophoresis, barley stripe mosaic virus, carnation ringspot virus, virions aggregation 3543.

detection endotoxins reaction, Limulus lysate test 9308.

Haemophilus influenzae, identification, serotyping 8113.

panicum mosaic virus, methodology 3536.

Immunofluorescence, bacteria, nitrogenase, assays 930.

Bacteroides, identification 865.

Chlamydia psittaci serotyping, sheep isolates 875.

comparison, immunoperoxidase test, detection, respiratory syncytial virus, diagnosis 9862.

counting methods, *Bacillus anthracis*, *Bacillus cereus*, spores 3573.

detection, *Claviceps purpurea* enzymes, association, Gramineae infection 5707.

detection, immunoglobulin G, immunoglobulin M, anti *Ureaplasma urealyticum*, serum, man 9932.

detection, rotavirus (human), feces, man 9864.

detection, *Xanthomonas campestris* pv. phaseoli, seed-borne diseases, Phaseolus vulgans 5800.

diagnosis, infection, influenza A virus, respiratory syncytial virus, nasopharynx secretion, man 9832.

identification *Pseudomonas syringae* pv. tomato, *Pseudomonas syringae* pv. syringae 6310.

immune status determination, rubella, man 9842.

immunoglobulin G, detection, cytomegalovirus 5375.

immunoperoxidase test, methodology, detection, viruses, genomes, cell culture 7231.

methodology, spores comparison, *Bacillus anthracis*, *Bacillus cereus* 9897.

methodology, use, antibiotic sensitivity testing, bacteria 1605.

+microplates, use, detection, antibodies, rotavirus 4471.

scrub typhus diagnosis, man 9964.

staining methodology, adenovirus, tissue culture 9845.

Staphylococcus aureus, cell walls, opsonins, immunoglobulins, binding 8122.

Staphylococcus enterotoxins identification 4918.

Immunogenically, Bordetella bronchiseptica vaccines, preparation, immunity, dogs 785.

Leptospira interrogans, vaccines, animal models 3455.

Mycobacterium bovis, use, vaccines 2601.

Neisseria meningitidis extracts, use, vaccines, mice 784.

nutrient status, effects on, vaccines, Vibrio cholerae, chemostats 1686.

parainfluenza virus 3 vaccines, proteins, hemagglutinins, mice, sheep 7189.

Streptococcus pneumoniae vaccines, man 3454.

vaccines, canine distemper virus, adenovirus (canine), parvovirus (canine), parainfluenza virus, Leptospira, bacterins, dogs 8924.

vaccines, mumps virus, measles virus, rubella virus, storage effects on 4429.

Yersinia ruckeri bacterins, vaccines, Salmo gairdner 8925.

Immunoglobulin A, serum levels, immunoperoxidase test, cytomegalovirus infection, man 6296.

Immunoglobulin G, anti polysaccharides, Streptococcus group B, enzyme-linked immunosorbent assay 5392.

antibody response, *Bacillus anthracis*, immune serum, enzyme immunoassay 9819.

detection, rabbits 855.

canine distemper virus, antigens, detection, enzyme-linked immunosorbent assay, methodology 5369.

Chlamydia trachomatis, detection, enzyme immunoassay 9894.

Chlamydia trachomatis, detection, enzyme-linked immunosorbent assay 9931.

detection, herpes simplex virus 2, antigens, enzyme-linked immunosorbent assay 7227.

detection, Staphylococcus teichoic acid, enzyme-linked immunosorbent assay, immunodiagnosis infection, man 9919.

immunoassays detection, cytomegalovirus 5375.

immunofluorescence detection, anti *Ureaplasma urealyticum*, serum, man 9932.

measles virus, detection, enzyme-linked immunosorbent assay 9857.

rotavirus, detection, use, immunofluorescence+microplates 4471.

rubella virus, detection, enzyme-linked immunosorbent assay, antigens attachment methodology 9851.

Immunoglobulin M, Chlamydia trachomatis, detection, enzyme-linked immunosorbent assay 9931.

detection, Staphylococcus teichoic acid, enzyme-linked immunosorbent assay, immunodiagnosis infection, man 9919.

immunofluorescence detection, anti *Ureaplasma urealyticum*, serum, man 9932.

man, hepatitis A, separation techniques, chromatography 1755.

measles virus, enzyme-linked immunosorbent assay 9013.

rotavirus, detection, use, immunofluorescence+microplates 4471.

serum levels, detection, enzyme-linked immunosorbent assay, Ross River virus, detection, man 9834.

vaccinia-zoster virus, man, detection, enzyme-linked immunosorbent assay 1751.

Immunoglobulins, opsonins, binding, cell walls, Staphylococcus aureus, immunofluorescence 8122.

rubella virus specificity, man, detection, enzyme-linked immunosorbent assay 3531.

Immunoperoxidase test, comparison, immunofluorescence, detection, respiratory syncytial virus, diagnosis 9862.

immunofluorescence, methodology, detection, viruses, genomes, cell culture 7231.

immunoglobulin A serum levels, cytomegalovirus infection, man 6296.

Immunoprecipitation, detection, herpes virus antigens 2658.

diagnosis, farmer's lung, Thermoplasma faeni, man 4486.

rubella virus structural proteins identification 1740.

Immunostimulants, peptides, Streptomyces, structure 918.

Streptomyces peptides, biological properties 921.

Streptomyces peptides, peptide synthesis 919.

Impatiens, amino acids, infection, Plasmopara obducens, \pm Meloidogyne incognita infection 2205.

Impatiens balsamina, Turnip mosaic virus infection, pathogenesis 3079.

Impatiens holstii, carlavirus infection 6792.

Imported diseases, plant diseases, crops 5666.

Inclusion bodies, induction, structure, potato virus X infection, Nicotiana tabacum 1238.

Inclusions, plant viruses, glutaraldehyde fixation, structure 4472.

Incompatibility, R factors, conjugation, identification methodology 3551.

Incubation, anaerobic environments, anaerobic bacteria, clinical isolates 2680.

media, agar dehydration 819.

temperature, effects on endotoxins biosynthesis, Yersinia enterocolitica 2950.

temperature, effects on, microorganisms inactivation, food spoilage rates 2926.

India, Ascomycetes, host range, substrate preferences 7645.

bacteria blight, Manihot esculenta, symptoms, etiology 4022.

Cajanus cajan, leafspot, Alternaria 3926.

Claviceps infection, Panicum repens, Panicum antidotale 6770.

clinical isolates, Salmonella typhimurium, drug resistance, R factors characterization 2408.

Corynespora cassicola infection, Lycopersicon esculentum, incidence 5009.

deserts, dunes stabilization, ecological distribution, soil microorganisms 1473.

Fuligo intermedia infection, Bryophyta, new records 2219.

geographical variations, susceptibility, endotoxins, Bacillus thuringiensis, Anopheles stephensi, Aedes aegypti, Aedes albopictus 293.

inoculose, Echinococcus frumentacea smut, Ustilago paradoxa 2138.

leafspot, Ailanthus excelsa, Phoma mediocrinis var. prodrella 2221.

Lycopersicon esculentum, bunchy top, new records 3042.

Medicago sativa, Verticillium albo-atrum wilt 4941.

milk products frozen food, bacteriology quality 6679.

milk products, Staphylococcus food contamination, incidence 2058.

new records, Pseudocercospora indica sp. nov. isolation, Zephiranthes rosea 3989.

new records, Rhizoctonia bataticola infection, Conandrum sativum 3978.

pathogens, tetracycline sensitivity 7077.

Pinus, Cercospora needle blight, eradication 5878.

Pinus patula, mycorrhizas, Thelephora terrestres 2303.

plants, phytoalexins, disease resistance, reviews 1369.

soil microorganisms, Thamnostylum, new records 7794.

soils (acid), Oryza sativa yield, Bacillus firmus indole-3-acetic acid biosynthesis 4225.

soils (saline), Azospirillum nitrogen fixation 7840.

Triticum, brown rust, stripe rust, gemplasm screening, field trials, disease resistance development 5726.

Triticum, mosaic disease, viruses etiology 3953.

Typha angustata, nitrogen fixation assays 7851.

Vigna unguiculata necrosis, Fusarium equiseti 2109.

Xanthomonas belitcola leafspot, Piper betle, disease resistance 4023.

Zea mays, Peronosclerospora sorghi oospores formation 3018.

Indicator species, Bacillus subtilis subsp. niger, ethylene oxide sterilization, factors affecting 4322.

bacteria, association, drinking water, waste water, water sources 797.

bacteria, composts, factors affecting survival 6252.

bacteria, enumeration, water sampling, light effects on 2625.

Chenopodium murale, carnation latent virus infection 6806.

chlorine inactivation, pH effects on, disinfection, drinking water 9812.

coliforms, bacterioidic activity, oil pollution, pollution effects 1550.

coliforms, counting methods, membrane filtration 2671.

coliforms, Escherichia coli, microbial pollution, surface water 1708.

coliforms, Escherichia coli, vegetables, freezing effects on 6668.

coliforms, microbial pollution, sewage outfalls 3482.

dairy products 6670.

food contamination, microbial pollution, drinking water, conferences 5454.

food contamination, milk, spraying, drying 4975.

marine pollution, microbial pollution, measuring techniques, Pelecypoda 8976.

microbial pollution, water supplies, books 9999.

poultry, meat 6669.

Salmonella typhimurium, Escherichia coli, Streptococcus faecalis, phage f2, enterovirus, ground water microbial pollution 8979.

seaflood 6671.

Spirillum volutans, pollution monitoring, sewage treatment plants 3464.

wastewater treatment, aerosols, coliforms, Cyanophyta phages 9796.

Indirect fluorescent antibody test, Aspergillus fumigatus 8153.

Bacteroides fragilis, antisera comparison 1803.

detection, enzyme immunoassay, human antibodies, methodology 6290.

detection, fungi, lung secretions, man 9079.

detection, varicella-zoster virus 6294.

diagnosis, legionnaire's disease, man 867.

diagnosis, respiratory syncytial virus infection, man 823.

Lassa fever virus, Marburg disease virus, Ebola virus, use β -propiolactone 3534.

monoclonal antibodies, respiratory syncytial virus 9855.

Indirect hemagglutination, diagnosis, brucellosis, cattle 4485.

diagnosis tick-borne encephalitis, Ixodidae 3518.

Haemophilus pleuropneumoniae, serotypes, antigenic relationship 9963.

rubella virus serum antibodies, immune status, comparison, enzyme-linked immunosorbent assay, hemagglutination inhibition 9837.

Indium, complex, enterochelin, antibacterial activity, Escherichia coli 1554.

Indole, biodegradation, Alcaligenes 8450.

metabolites, Aspergillus flavus sclerotia, association, evolution 3715.

odors compounds, biodegradation, Pseudomonas, Bacillus, Corynebacterium 5580.

Indole-3-acetic acid, association, Pisolithus tinctorius effects on Malus domestica roots growth 591.

biosynthesis, Bacillus firmus, Oryza sativa yield, soils (acid), india 4225.

biosynthesis, Rhizobium japonicum mutants, tryptophan catabolism 8198.

effects on Fusarium moniliforme nicotinic acid biosynthesis 1841.

effects on Trichoderma reesei cellulase production, spore germination 8320.

mycorrhizas, Pisolithus tinctorius, gas chromatography 8171.

Indole-3-acetic acid, (continued)

Rhizobium, role nodulation, root hairs, Leguminosae 1509.
Indole-3-glycerol-phosphate synthase,
 -phosphoribosyl-anthranilate isomerase, X-ray crystallography, *Escherichia coli* 960.

Indolepyruvic acid,

biosynthesis, *Rhizobium japonicum* mutants, tryptophan catabolism 9198.

3-Indolylmethylglycine

conversion, role, clubroot, Cruciferae 5761.

Indomethacin,

inhibition, interferon antiviral activity 3346.

inhibition, interferon, antiviral activity, characterization 2484.

Industrial effluents,

abattoirs, effects on soil microorganisms, soils (loam) 2381.

breweries, protein production, activated sludge 8932.

breweries, wastewater treatment, pH effects on 4438.

coal, industrial sites, bibliographies 1693.

dairy industry, Wastewater treatment, bibliographies 1695.

distilleries, *Candida tropicalis*, growth conditions 9231.

distilleries, production, single-cell protein, yeasts 8489.

distilleries, single-cell protein production, *Candida utilis*, chemical composition, amino acid composition 9118.

distillation, wastewater treatment, bibliographies 1694.

food industry, treatment, methodology, reviews 732.

molluscs, wastewater treatment, digestion (anaerobic) 4445.

pulp mills, digestion (anaerobic), detoxification 4446.

pulp mills, Klebsiella pneumoniae survival, microbial pollution, lakes 1715.

pulp mills, paper mills, coal removal, use, *Coniurus versicolor* 8961.

pulp mills, pigments removal, *Coniurus versicolor*, immobilized cells 8959.

pulp mills, wastewater treatment, environmental effects, bibliographies 2608.

pulp mills, wastewater treatment, fungi 6245.

textile industry, wastewater treatment, bibliographies 1696.

wastewater treatment, oil, digestion (anaerobic) 5305.

wastewater treatment, purification, *Pseudomonas*, *Bacillus* 793.

Industrial microbiology,

books 4548.

conferences 5459.

glycols, biodegradation, measuring techniques 5577.

wastewater treatment methodology, cost-benefit analysis 5320.

Industrial sites,

coal, industrial effluents, bibliographies 1699.

petroleum, industrial wastes, environmental effects, bibliographies 2609.

Industrial wastes,

ash, aluminum extraction, citric acid, *Aspergillus niger* 5989.

composting, land disposal, reviews 6242.

denitrification, carbon sources, denitrifying bacteria 3473.

digestion (anaerobic), methanogenesis, microorganisms, reviews 7196.

explosives, biodegradation, reviews 5378.

food industry, single-cell protein production, economics 9108.

food industry, single-cell protein production, *Fusarium*, *Sporotrichum* 9112.

industrial sites, petroleum, environmental effects, bibliographies 2609.

isolates, *Penicillium chrysogenum* mycelia, mannitol dehydrogenase purification, characterization 5514.

land disposal, pathogens inactivation, occupational exposure risks, reviews 5978.

limes processing, *Propionibacterium shermanii* use, cyanocobalamin production 8391.

oil and gas industry, land disposal, soil microorganisms biodegradation, petroleum 5983.

paints processes, waste water oxidation 5318.

pharmaceuticals, soil microorganisms decomposition, land disposal, reviews 5984.

pharmaceuticals, detergents, biodegradation, reviews 5515.

soil microorganisms biodegradation, land disposal, books 6360.

sugar beets, use, *Trichoderma reesei* protein biosynthesis, animals feeds 8493.

suifite, *Candida* biodegradation 2904.

tanning, digestion (anaerobic), methanogenesis 8964.

wastewater treatment, water pollution, microbiology 5317.

Industrial water systems,

breweries, disinfection, spoilage bacteria 5321.

breweries, *Pedococcus* contamination, bactericides control 8966.

cooling water, fouling organisms, films, bacteria 6257.

Industries,

activated sludge, wastewater treatment 5307.

applications, bacteria, polysaccharides, reviews 9200.

bacteria biodegradation, conferences 4740.

bacteria biodegradation, history, conferences 4754.

biodegradation, fungi detection, conferences 4757.

microorganisms biodegradation, conferences 5457.

water water, phosphorus treatment, nitrogen removal 5319.

water supplies, bacteria biodegradation, conferences 4756.

Infants,

men, disinfection, bottles, bottle feeding, bacteria 800.

Infectious anemia virus,

envelopes glycoproteins isolation, lectins affinity chromatography 8097.

Infectious diseases,

association, dairy products, milk, man 9275.

hospitals wastes, waste disposal, hygiene 799.

Streptococcus group D, man, association, clinical isolates antibiotics susceptibility 8826.

treatment, drugs, antibiotics, antimicrobial activity, books 1817.

Vigna unguiculata, germplasm reaction 5688.

Infectious pancreatic necrosis virus,

antiviral activity, phenylheptatriene 7097.

cell culture, assays, carriers, *Salmo gairdneri* 5376.

Infectivity,

American plum line pattern virus, *Prunus* 394.

bauchli effects on, antiviral activity, tobacco mosaic virus 1386.

C-type virus, preservation, freeze-drying 1745.

chlorine, effects on, hepatitis A virus, *Saguinus fuscicollis*, *Saguinus nigricollis*, *Saguinus labiatus labiatus*, experimental infection 2488.

leaf rust, *Puccinia recondita*, *Triticum aestivum* 370.

mycelia, chlamydospores, forestry soil effects on *Phytophthora* 1483.

pea enation mosaic virus, *Acyrtophis pisum* 2107.

potato virus Y, potato virus M, potato virus A, preservation, freeze-drying, dehydration 2653.

red clover mottle virus, stability, factors affecting, *Pisum sativum* 2099.

Infectivity, (continued)

relationship, RNA, cucumber mosaic virus, white leaf disease, *Lycopersicon esculentum* 2195.

soil microorganisms, *Phytophthora megasperma*, *Pythium irregulare*, roots, *Trifolium repens* 350.

tests, food contamination, *Salmonella* inoculation, feeds 253.

Trypanosoma cruzi trypomastigotes, Vero cells, proteins biosynthesis, morphology 1824.

Infestation,

Ostrinia nubilalis, effects on *Diploia maydis*, stalk rot, disease resistance *Zea mays* 361.

Influenza,

antiviral activity, macrolide antibiotics 7941.

drug resistance, remantadine interaction lipid membranes 3266.

Influenza A virus,

adamantane, derivatives, antiviral activity, tissue culture 7949.

antigens, detection, enzyme immunoassay 9840.

antiviral activity, amantadine, ribavirin 3359.

antiviral activity, amantadine, ribavirin 3361.

antiviral activity, macrolide antibiotics 7941.

drug resistance, remantadine, amantadine, plaque assay 9635.

factors affecting, antigens detection, erythrocytes, hemolysis, man 824.

infection, immunofluorescence diagnosis, nasopharynx secretion, man 9832.

oligosaccharides biosynthesis, streptoviridin antiviral activity, cell culture 8086.

purification, column chromatography 7225.

splitting products vaccines, antibody response, children 3451.

variants, drug resistance, amantadine, remantadine, production, methodology 1546.

Influenza B virus,

antiviral activity, macrolide antibiotics 7941.

oligosaccharides biosynthesis, streptoviridin antiviral activity, cell culture 8086.

splitting products vaccines, antibody response, children 3451.

Influenza virus,

antibodies, characterization, complement fixation, methodology 9863.

antiviral agents, antiviral activity, reviews 5215.

computer applications, spectrofluorometry, methodology 8107.

detection, use, enzyme-linked immunosorbent assay-nylon 4468.

noramide antiviral activity, chick embryos 9692.

protein biosynthesis, proteinase, inhibitors, effects on 1583.

reproduction, proteinase inhibitors, antiviral activity 9686.

Inga lenticul,

nitrogen fixation, nutrient sources, agricultural ecosystems, *Coffea* 3226.

nodulation, nitrogen fixation shading, phosphorus fertilizer applications effects on 7843.

Inheritance,

blackeye cowpea mosaic virus, cowpea aphid-borne mosaic virus disease resistance, *Phaseolus vulgaris* 4088.

Colletotrichum coffeanum disease resistance, *Coffea arabica* 6864.

disease resistance, *Ascochyta rabiei* blight, *Cicer arietinum* 6867.

disease resistance, Brown spot, *Bromus inermis* 6688.

disease resistance, *Erysiphe graminis* f.sp.tritici powdery mildew, *Triticum aestivum* 9464.

disease resistance, rust, *Uromyces viciae-fabae*, *Vicia faba* 2253.

disease resistance, wilt, *Medicago sativa* 6862.

disease resistance, *Zea mays*, maize dwarf mosaic virus infection 6841.

Elsinoe brasiliensis disease resistance, *Manihot esculenta* 6828.

Fusarium oxysporum f.sp.ciceri, wilt, disease resistance, *Cicer arietinum* 4062.

grassy stunt virus disease resistance, *Oryza sativa*, *Oryza nivara* 5037.

Oryza sativa disease resistance, *Xanthomonas campestris* pv.oryzae blight 9364.

Phakopsora pachyrrhizi rust disease resistance, genetic analysis, *Glycine max* 3858.

Pseudomonas lachrymans disease resistance, *Cucumis sativus* 6851.

soybean mosaic virus disease resistance, *Phaseolus vulgaris* 6855.

stem rust disease resistance, *Triticum aestivum* 1348.

tobacco mosaic virus disease resistance, plant breeding, *Nicotiana tabacum* 3115.

Triticum aestivum, disease resistance, rusts, *Puccinia tritica* 2255.

Zea mays disease resistance, *Colletotrichum carbonum* infection 4255.

Inhibitors,

Aspergillus niger citric acid production 8210.

growth, *Lilium*, plant viruses infection 7703.

prostaglandin synthase, thielavin, structure, *Thielavia terrecola* 7490.

proteinase, influenza virus reproduction, antiviral activity 9686.

Inoculum potential,

Phytophthora infestans, blight, epidemiology, *Solanum tuberosum* 424.

Inonotus dryophili,

white rot, decay association, *Quercus alba*, *Quercus macrocarpa* 5880.

Inonotus glomeratus,

heart rot, wood decay, oxygen, carbon dioxide effects on 5084.

Inonotus obliquus,

infection, *Betula papyrifera*, pathogenesis 1450.

Inorganic compounds,

membranes, bacteria ultrafiltration, milk 4782.

phosphates, assays methodology, bacteria 4498.

Inorganic pyrophosphatase,

binding sites, *Saccharomyces cerevisiae*, terbium ions interaction 4667.

kinetics, reviews, bacteria 6465.

levels, chlorotetracycline biosynthesis, *Streptomyces aureofaciens* 8004.

levels, *Escherichia coli* cell division temperature-sensitive mutant, penicillins effects on 8000.

purification, activity, *Streptomyces aureofaciens* 7321.

purification, activity, *Streptomyces aureofaciens* 7321.

purification, activity, *Streptomyces aureofaciens* 7321.

Inosine,

biosynthesis, *Bacillus subtilis* mutants, 5'-nucleotidase use 122.

Inosinic acid,

biosynthesis enhancement, *Brevibacterium ammoniagenes* permeability mutants, genetic factors 1847.

5'-Inosinic acid,

production, *Brevibacterium ammoniagenes*, association drug sensitivity testing 8776.

Insects,

association, fungi, seeds, deterioration 2975.

bacteria, biological control, commercial species, marketing 1021.

bioassays, virulence, methodology, *Deuteromyces* 1002.

biological control, *Bacillus sphaericus*, powder production 1023.

biological control, *Bacillus thuringiensis*, developing countries, research

Insects, (continued)

- programs 1027
 - biological control, *Bacillus thuringiensis* spores, persistence, soil 1007.
 - biological control, bacteria, fungi, viruses 7471.
 - biological control, Chytridiomycetes, Zygomycetes, life cycle 1015.
 - biological control, developing countries 1028.
 - biological control, Entomophthorales, conidia, spores, survival, environmental conditions 1009.
 - biological control, nuclear polyhedrosis virus, granulosis virus, control programs 9212.
 - biological control, pathogens, *Bacillus thuringiensis* 999.
 - biological control, pathogens, safety regulations 1025.
 - biological control, pest control, baculovirus, persistence 1005.
 - biological control, use Entomophthorales, culture 1805.
 - biological control, use Hyphomycetes, culture 1806.
 - biological control, use Hyphomycetes, virulence 1004.
 - biological control, viruses, bacteria, fungi 4722.
 - nuclear polyhedrosis virus biological control, safety studies, animal models 4710.
 - phytoecicity, plants, biological control, viruses, fungi, books 9093.
 - pathogens, biological control, foliar applications, crop fields 992.
 - pathogens, isolation, culture, methodology, Entomophthorales 1783.
 - pathogens, microorganisms, immunoassays detection 1736.
 - pest control, biological control, Entomophthorales 1000.
 - pest control, biological control, Hyphomycetes 1003.
 - pest control, biological control, pathogens 968.
 - pest control, biological control, pathogens, conferences 1819.
 - pest control, biological control, pathogens, foliar applications 993.
 - pest control, biological control, pathogens, methodology, dissemination, fungi 994.
 - pest control, biological control, pathogens, viruses 990.
 - pest control, pathogens, fungi 995.
 - pest control, virulence, bioassays, Entomophthorales 1001.
 - vectors, bacteria, plant diseases, reviews 2969.
 - vectors, disease control, biological control, microorganisms 6622.
 - vectors, disease transmission, biological control, research programs 1029.
 - vectors, viruses, mycoplasma-like organisms, rickettsia-like organisms, plant diseases 1120.
- Insecticides.**
- Beta vulgaris*, crop rotation, effects on, fungi, soil 618.
 - control, pests, *Triticum aestivum* 2273.
 - disease control, *Nephotettix virescens*, vectors, rice tungro virus 6847.
 - disease control, *Rhizoctonia solani*, Glycine max 8625.
 - disease control, vectors, cowpea banding mosaic virus infection, *Vigna unguiculata* 5808.
 - disease control, vectors, rice tungro virus infection, *Oryza sativa* 8613.
 - effects on enzymes activity, soil microorganisms, agricultural land 5969.
 - effects on, *Rhizoctonia solani*, *Verticillium albo-atrum*, wilt, rhizosphere microorganisms, *Solanum tuberosum* 1512.
 - effects on soil microorganisms activity 5970.
 - grain, stored products, fungi, degradation, malathion, *Aspergillus glaucus* 7557.
 - phenolanthrophenol effects on electron transport, soil microorganisms 2378.
 - production, *Verticillium lecanii*, secondary metabolism 6593.
 - role, *Aspergillus parasiticus* aflatoxins inhibition, *Zea mays* 8557.
 - soaps, foliar applications, *Alternaria panax* infection *Brassica acinaphylla*, *Bipolaris setariae* infection *Chrysaliococcus luteus*, *Fusarium moniliforme* infection *Dracaena marginata* 9486.
 - toxicity, *Lagenidium giganteum* 8606.
 - use, disease control, *Hordeum vulgare* 7676.

Institutions.

- children, surfaces contamination, coliforms 3494.
- education, floors, keratinophilic fungi isolation 8983.

Integrated control.

- damping-off, herbicides, nematocides, crop rotation, soil fumigation, *Cucumis sativus* 9473.
- Fusarium oxysporum* f.sp. *lycopersici*, wilt, benomyl + nitrate + calcium oxide, *Lycopersicon esculentum* 4108.
- Fusarium oxysporum* f.sp. *lycopersici*, wilt, nitrate + calcium oxide + benomyl, *Lycopersicon esculentum* 4107.
- Trichoderma harzianum* bulbs treatment, soil solarization, soil-borne diseases, *Indocaea* 7768.

Interferon.

- antibacterial activity 2426.
 - antibacterial activity 7922.
 - antimicrobial activity, bacteria, viruses 7952.
 - antiviral activity, cytomegalovirus 8796.
 - antiviral activity inhibition, indomethacin, ibuprofen, oxyphenylbutazone 3346.
 - antiviral activity, mengovirus, L cells 7103.
 - antiviral activity, Moloney leukemia virus, virions, infection, cells, biochemical analysis 696.
 - antiviral activity, radioimmunoassay 1759.
 - antiviral activity, RD-114 virus infected cell lines 9699.
 - antiviral activity, reviews 4311.
 - antiviral activity, tunicamycin potentiation 9690.
 - antiviral activity, vesicular stomatitis virus, encephalomyocarditis virus, regulation, double-stranded RNA, L cells 7105.
 - antiviral activity, vesicular stomatitis virus, immunoassays 9698.
 - antiviral activity, viruses 3355.
 - antiviral state, cells 3345.
 - antiviral state, cells, effects on 3350.
 - antiviral state, lysolecithin permeabilized mice 373 cells 3370.
 - conjugation, *Ricinus communis* toxins, antiviral activity 3348.
 - indomethacin, aspirin, inhibitor, antiviral activity, characterization 2484.
 - infection inhibition, vesicular stomatitis virus, herpes simplex virus, neurons, tissue culture 2490.
 - inhibition growth, Moloney sarcoma virus transformed cells, fibroblasts 3369.
 - inhibition, murine sarcoma virus, replication 7113.
 - inhibition, protein biosynthesis, vesicular stomatitis virus, antiviral activity 1575.
 - levels, tissue culture vesicular stomatitis virus infection, enzyme immunoassay 1749.
 - susceptibility, herpes simplex virus clinical isolates 7108.
- α -Interferon.**
- antibacterial activity, *Staphylococcus* 886.
 - antiviral activity 6076.
 - antiviral activity, encephalomyocarditis virus, cell culture 7109.

 α -Interferon, (continued)

- antiviral activity, enzyme immunoassay, relationship vesicular stomatitis virus antigens biosynthesis 1762.
- antiviral activity, tumor cells 7946.
- simulation nucleotides biosynthesis, antiviral activity, tobacco mosaic virus, antiviral agents, *Nicotiana glutinosa* 7746.
- susceptibility, bovine rhinotracheitis virus, pseudorabies virus 6074.

 β -Interferon.

- liposomes incorporation, antiviral activity 1579.
- synergism, antiviral agents, antiviral activity, herpes simplex virus 1, Vero cells 697.

Interspecific hybridization.

- Arachis*, plant breeding, *Cercospora arachidicola*, disease resistance 7727.
- Penicillium*, protoplasts fusion, strains selection 5439.
- Ribes nigrum*, \times *Ribes rubrum*, plant breeding, disease resistance, Sphaerotheca 1345.
- Streptomyces coelicolor* + *Streptomyces olivaceus*, antibiotic resistance, antibacterial activity 9716.
- Zinnia elegans* \times *Zinnia angustifolia*, plant breeding, disease resistance, powdery mildew 7729.

Interspecific relationships.

- competition, *Glomus*, mycorrhizas, *Zea mays*, *Allium* 5894.
- fungi, dialysis, membranes, methodology 2715.
- mutualism, mycorrhizas, *Rhizobium*, *Leguminosae* 9555.
- rust, *Uromyces appendiculatus*, *Verticillium lecanii*, population dynamics, *Phaseolus vulgaris* 2108.

Intestinal environment.

- bacteria, polysaccharides characterization 7443.

Intestinal microflora.

- anaerobic bacteria, salinomycin administration effects on, pigs 5624.
- juveniles, chickens, *Escherichia coli* drug resistance 2411.
- lactic acid bacteria feeds effects on, domestic animals 3850.
- lactose digestion, *Lactobacillus acidophilus* milk, man 7581.
- man, *Bacteroides* endo-1,3- β -D-xylanase, xylan biodegradation 2022.
- pigs, feeds, *Streptococcus faecium* effects on 4659.
- fishes, bacteria, pollution indicators, water pollution, Iran 1725.
- propachlor metabolism, 2-mercapto-N-isopropylacetanilide production 8385.
- rats, mutagens, association, cytosine acetylation, genetic analysis 4510.

Intestine.

- man, bacteria infection, carriers, hygiene, sanitation 7208.
- turkeys, isolates, media (isolation) methodology 8135.

Intoxication.

- bacteria food contamination, hygiene, prevention, man 194.

Interspecific relationships.

- Eucalyptus* regnans, disease resistance, *Phytophthora cinnamomi* infection 8653.
- Rhizobium*, association, Glycine max nodulation 9605.

Inulin.

- effects on, *Kluyveromyces marxianus* growth, ethanol biosynthesis 3748.
- hydrolysis, *Cynara scolymus*, *Kluyveromyces fragilis* inulinase characterization 71.
- Pichia polymorpha*, 2,1- β -D-fructan fructano-hydrolase, immobilized cells, use, *Saccharomyces rosei*, ethanol production 8410.

Inulinase.

- characterization, *Kluyveromyces fragilis*, *Cynara scolymus* inulin hydrolysis 71.
- Kluyveromyces fragilis*, production, carbon sources effects on, continuous culture 2813.

Invertase.

- biosynthesis, *Saccharomyces*, 8-hydroxyquinoline effects on 9184.

Invertebrata.

- activity, soil properties, recreation, environmental impact 6892.

Iodination.

- tyrosine residues, ribosomes, ribosomal subunit 50S, *Escherichia coli* 7289.

Iodine.

- antiviral activity, poliovirus 2468.
- Bacillus subtilis* spores resistance 5177.
- teat dips, mastitis incidence, cattle 4462.

5-Iodo-2'-deoxyuridine.

- analogs, antiviral activity, herpes simplex virus 1, herpes simplex virus 2 5214.
- pretreatment, *Varicella-zoster* virus infected cells, effects on replication 3365.

antiviral activity 6063.**3-Iodo-2-propynyl butyl carbamate.**

- disease control, sap stain, wood storage, *Liiodendron tulipifera*, *Pinus* 9529.
- disease control, stain, wood, *Pinus* 5882.

Iodoacetamide.

- cytochrome c chemical modification, folding kinetics, fluorescence, structure-activity

3-Iodobenzole acid.

- bacteria, dehaemoglobin, lakes, sediments 6648.

Iododeoxyuridine.

- drug sensitivity testing assays, herpes simplex virus 1, herpes simplex virus 2 6075.

Iodopenicillanate.

- inhibition, β -lactamase, bacteria 3404.

Iodophor.

- disinfectants aerosols, airborne microorganisms 5346.

disinfection, hand, man 816.**E-5-(2-Iodoethyl)-2'-deoxyuridine.**

- antiviral activity, *varicella-zoster* virus 5211.

Ion-exchange chromatography.

- Actinomyces laundulae* cholesterol oxidase, purification, characterization 6554.
- RNA, isolation, yeasts 5480.

Ionizing radiation.

- disinfection, *Mycobacterium*, drinking water 2500.
- drinking water disinfection, *Mycobacterium* 3487.

Ionophore A23187.

- biosynthesis, *Streptomyces chartreusis* 3447.

Ions.

- monitoring, differentiation methodology, *Mycobacterium tuberculosis*, *Mycobacterium avium-intracellulare*, animal isolates 4496.

- lons, (continued)**
 permeal, polymyxin B effects on, *Escherichia coli* 758.
- Ipomoea batatas**,
 roots, extracts, agglutination, *Ceratocystis fimbriata*, spores, host specificity, black rot 3095.
- Ipomoea batatas**,
 rhizosphere, Azospirillum, nitrogen fixation 9594.
 stem canker, *Fusarium solani* 5000.
 witches' broom, mycoplasma-like organisms, disease transmission, *Orosius lotophagorum nyukyensis* 9424.
- Ipomoea triloba**,
 witches' broom, mycoplasma-like organisms, disease transmission, *Orosius lotophagorum nyukyensis* 9424.
- Iridaceae**,
 antifungal activity, tolerance, *Ampelomyces quisqualis* 1401.
 = *Bacillus subtilis* biological control, white rot, *Allium cepa*, seed treatments 4103.
 disease control, Brassica oleracea seeds leafspot 508.
 disease control, grey mold, *Botrytis cinerea*, *Cyclamen graecum* 1424.
 disease control, post-harvest decay, peaches 4129.
 disease control, *Rhizoctonia solani*, stem canker, black scurf, *Solanum tuberosum* 5055.
 effects on fungi spore germination 7765.
 effects on *Monilinia fructicola*, growth, sporulation, isolation 2282.
 resistance, *Botrytis squamosa* 1519.
 resistance, *Fusarium nivale* 1530.
 resistance, *Monilinia fructicola*, infection, *Prunus persica*, pathogenicity 2278.
 resistance, *Monilinia laxa* 7900.
 resistance, *Sclerotinia homoeocarpa* 6010.
 treatment, brown spot, *Drechslera oryzae*, *Drechslera sorokiniana*, *Zizania aquatica* 2272.
 treatment, pythium infection, Gramineae 4114.
 use, ornamental plants disease control 5056.
- Iran**,
 plants extracts, antibacterial activity 2458.
 water pollution, pollution indicators, *Pisces* intestinal microflora bacteria 1725.
- Iremycin**,
 antibacterial agents 3438.
- Iridaceae**,
 bulbs, *Rhizoctonia solani* survival, storage conditions effects on 3973.
- Iris germanica**,
 leafspot, incidence, USA, Arkansas 4988.
- Iron (II)**,
 activation alcohol dehydrogenase, kinetics, *Zymomonas mobilis* 7407.
- Iron**,
 acquisition, *Vibrio vulnificus*, association, siderophores production 8369.
 antimicrobial activity, *Entamoeba histolytica*, *Staphylococcus aureus* 2497.
 association, *Glomerella cingulata*, rat, *Capsicum frutescens* 3999.
 bacteria uptake, wastewater treatment 5313.
 chelating agents, *Boletus edulis* extracts, soil 5558.
 containing proteins, purification, characterization, *Desulfovibrio gigas* 5462.
 coordination geometry, cytochrome c heme, N.M.R., *Saccharomyces cerevisiae*, *Candida krusei* 3643.
 coordination geometry, cytochrome c551 heme, N.M.R., *Rhodospseudomonas gelatinosa* 3653.
 effects on *Corynebacterium diphtheriae* toxins production, association, mutation 3699.
 effects on Penicillium, growth, penicillin biosynthesis 1617.
 effects on phosphate-dissolving bacteria inoculation, yield, *Vicia faba* 5892.
Escherichia coli uptake, role, streptogramin bactericidal activity 1679.
 levels, nitrogenase cofactors, *Clostridium pasteurianum* 4593.
 oxidation, temperature effects on, bacteria, rivers contamination, mines waste water 5134.
 reduction, soil, flooding, metabolism, bacteria 6959.
 starvation, electrophoresis methodology, siderophores detection, microorganisms 8090.
 valency, pyrite solubilization, oxidation, *Thiobacillus ferrooxidans* 8709.
- Iron II**,
 oxidation, acidophilic iron-oxidizing bacteria, mines drainage 1515.
- Iron (III)**,
 reduction, iron-oxidizing bacteria, sulfur bacteria 3257.
- Iron-depositing bacteria**,
 media (isolation), methodology 7259.
- Iron-oxidizing bacteria**,
 contamination, wells 3483.
 identification, isolation, drinking water 9818.
 iron II oxidation, mines drainage 1515.
 iron (III) reduction 3257.
 levels, vertical distribution, reclaimed land, coal mines 9561.
- Iron-reducing bacteria**,
 media (isolation), methodology 7259.
- Iron-sulfur centers**,
 interaction *Sirihema*, E.S.R., sulphite reductase (NADPH), *Escherichia coli* 2807.
 nitrite reductase (NADH), E.S.R., *Escherichia coli* 73.
- Irpex lacteus**,
 cellulase, exo-cellulohydrolase, transglycosylation activity 6453.
 milk-clotting enzymes, purification, characterization 6521.
 USA mines forest products biodegradation 7792.
- Irrigation**,
 crop fields, USA, Arizona, *Pythium aphanidermatum* inoculum density, *Beta vulgaris* 428.
 effects on *Tuber melanosporum* fruit bodies production, *Quercus lanuginosa* 6899.
 ornamental plants, effects on leafspot pathogenesis 1274.
 soil moisture, *Rhizobium japonicum* nitrogen fixation, yield, *Glycine max* 6993.
 trickle, plant diseases, crops 5667.
- Irumamycin**,
 structure, N.M.R. 5279.
- Irumanolide I**,
 characterization, *Streptomyces* 9770.
- Irumanolide II**,
 characterization, *Streptomyces* 9770.
- Iseriopsis griseola**,
 disease resistance, genetic variance, *Phaseolus vulgaris* 6863.
- Isoagatholacton**,
 Spongia officinalis, antibacterial activity 8769.
- Isoamylase**,
 biosynthesis, *Ipomoea kononenkoae* 1853.
 structure, X-ray scattering, *Pseudomonas* 964.
- Isobutyric acid**,
 antifungal activity, wheat post-harvest decay 441.
 preservation, feeds 5625.
 preservation, spoilage fungi, corn 5626.
- Isocitrate dehydrogenase (NAD⁺)**,
 Dictyostelium discoideum, purification, characterization 70.
- Isocitrate dehydrogenase (NADP⁺)**,
 purification, *Azotobacter vinelandii* 6534.
- Isocitrate lyase**,
 purification, characterization, *Lactobacillus zymus* 7336.
- Isoelectric acid**,
 overproduction, *Saccharomycopsis lipolytica*, enzymes activity association 5483.
- Isoelectric focusing**,
 β -lactamase, *Citrobacter diversus*, *Branhamella catarrhalis* 8292.
 β -lactamase, *Escherichia coli*, *Pseudomonas aeruginosa* 7383.
 methodology, cellulose acetate membranes, bacteria β -lactamase 9038.
 neuramidase, *Bacteroides fragilis*, electrophoresis, activity 7377.
 proteolytic enzymes, *Streptomyces* 5521.
Staphylococcus aureus, exotoxins 7629.
- Isoflavones**,
 biodegradation, *Nectria haematococca* 8434.
 Lupinus, antifungal activity 7095.
- Isohematinic acid**,
 Actinoplanes philippinensis, biosynthesis 8902.
 Actinoplanes philippinensis, physico chemical properties, antibacterial activity 8903.
- Isoleucine**,
 activity, isoleucyl-tRNA synthetase activation, role ATP, *Escherichia coli* 4596.
 nutrient requirements, monensin biosynthesis, *Streptomyces cinnamonensis* 8016.
- Isoleucyl-tRNA synthetase**,
 activation isoleucine activity, role ATP, *Escherichia coli* 4596.
- Isoniazid**,
 = dimethyl sulfoxide, antimycobacterial activity, *Mycobacterium avium-intracellulare* 2401.
 drug resistance, *Mycobacterium tuberculosis*, clinical isolates, Korea Rep. 9656.
 drug sensitivity testing, *Mycobacterium intracellulare*, infection, monkeys, clinical aspects 4285.
 serum levels, bioassays, *Mycobacterium aurum* 2421.
- Isoopenicillin N**,
 Cephalosporium acremonium, production 7149.
 Streptomyces tokonensis sp. nov. biosynthesis 3410.
- Isoopenicillin N sulfoxide**,
 derivatives, penicillin biosynthesis intermediates 8846.
- Isoopogon carotophyllus**,
 Phytophthora cinnamomi infection, water relations 3982.
- Isoopenolide**,
 isolation, *Solanum tuberosum* tubers, *Phoma exigua* var. foveata infection 3974.
- Isoerythrinone**,
 Spongia officinalis, antibacterial activity 8769.
- Isoopropanol**,
 + butanol + ethanol, fermentation, *Clostridium beijerinckii* immobilized cells 9241.
 production, *Clostridium beijerinckii*, *Clostridium aurantibutyricum* 2845.
- Isoptera**,
 disease transmission, *Fusarium udum* wilt, *Cajanus cajan* 2987.
 mounds, soil microorganisms, population dynamics, Kenya 8669.
- Isotopes**,
 dilution methodology, nitrogen fixation estimation, field trials, greenhouses trials 5126.
 methodology, nitrogen fixation analysis, leguminosae 5131.
- Isovaleric acid**,
Clostridium bifementans, biosynthesis enzymes isolation, characterization 9174.
- Isoxazolyll penicillins**,
 inactivation, β -lactamase 2544.
- Israel**,
 Cucumis melo collapse, *Monosporascus eutypoides* role 9380.
 dispersal, *Fusarium oxysporum* f.sp. vasinfectum, wilt, association, *Gossypium barbadense* 6817.
 Hedysarum coronarium, *Rhizobium symbiosis*, nitrogen fixation 5947.
 Leguminosae, nitrogen fixation 5946.
 Leguminosae, seeds, *Rhizobium* inoculation, problems 5945.
 oral hygiene, children 8999.
 Pisum sativum, *Pseudomonas syringae* pv. pisi blight, incidence 9335.
Solanum tuberosum, metalaxyl resistance *Phytophthora infestans* incidence, infectivity 6798.
- Istamyacin B**,
 derivatives, antibacterial activity, gram-positive bacteria, gram-negative bacteria 7055.
- Iteaconic acid**,
 biosynthesis relationship, *Aspergillus terreus* tricarboxylic acid cycle activity 3132.
- Italy**,
 Hedysarum coronarium, symbiosis, *Glomus mosseae*, growth 6975.
 lakes, bacteria distribution, seasonal variations 7203.
 Shigella, antibiotic sensitivity testing, antibiotic resistance transfer 8829.
- Iturn A**,
 structure, N.M.R., mass spectroscopy, *Bacillus* 9774.
- Ivory Coast**,
 Glycine max, cowpea mild mottle virus isolation, characterization 2115.
 Physalis angulata, pepper vein mottle virus infection, symptoms 1235.
 wells, microbial pollution 3486.
- Ixodidae**,
 Ixodes, antibacterial activity 1552.
 tick-borne encephalitis, diagnosis, indirect hemagglutination 3518.
- Jamaica**,
 mycoplasma-like organisms yellowing, *Cocos nucifera*, roots symptoms 2228.
 public health, *Vibrio*, pathogenicity, *Crassostrea rhizophorae* 8968.

Jamaica, (continued)

Vibrio pathogenicity, Jamaica, public health 8968.

Japan,

bacteria, production, fatty acids, use, mandarin orange peel 4260.
leprosy, subclinical infection detection, fluorescent antibody test 847.
metaphotrophic bacteria, culture methodology proteins production 4502.
Phaseolus angularis, Phialophora gregata isolates, pathogenicity 4932.
soil, carbon dioxide gas production, temperature, dissolved organic carbon, effects on 8668.
viruses infection, Oryza sativa 4955.

Japanese encephalitis virus,

glycoproteins, detection, concanavalin A, methodology 3541.

Jordan,

viruses infection, Lycopersicon esculentum 6793.
watermelon mosaic virus infection, Cucurbita pepo, incidence, prophylaxis, economic importance 1317.

Josamycin,

antibiotic resistance, Staphylococcus aureus 9646.
antibiotic sensitivity testing, streptococcus 9718.

Juglans nigra,

anthracnose, leaves penetration, Marssonina juglandis 3029.
Gnomonia leptostylia anthracnose disease resistance, genetic analysis, selection 5874.
roots, endomycorrhizas infection, soil moisture effects on 6900.

Juglone,

biodegradation, Pseudomonas putida 8453.

Juices,

lettuce, bacteria contamination, public health, man 4792.
tomatoes, canning, sterilization, baths 262.
tomatoes, pectin protection, heat resistance, Lactobacillus fermentum 6660.

Juncus articulatus,

Entorrhiza casparyana, galls 9403.

Juniperus,

Phytophthora cinnamomi experimental infection, disease resistance 472.

susceptibility, Kabatina juniperi infection 1459.

Juniperus chinensis var. argentei,

fertilization + Gigaspora margarita, Glomus mosseae effects on 4134.

Juniperus procera,

forests, rhizosphere, inhibition nitrification 3223.

Juveniles,

cattle, diarrhea isolates, Escherichia coli, antibiotic resistance 1534.
cattle, Enterobacteriaceae infection, antibiotic resistance 643.
cattle, feeding, milk substitutes, Escherichia coli isolation, antibiotic sensitivity testing 8742.
cattle, Feeding trials, pasteurized milk, Staphylococcus aureus 4869.
chickens, intestinal microflora, Eschenchia coli drug resistance 2411.

Kabatiella zaeae,

eye spot, yield reduction, Zea mays 4964.
eyespot, disease resistance, plant breeding, Zea mays 9456.

Kabatina juniperi,

infection, Juniperus, susceptibility 1459.

Kalanchoe,

Agrobacterium tumefaciens, crown gall, temperature effects on 8574.
sap, antiviral activity 3344.
tumors induction, Agrobacterium tumefaciens, osmotic pressure effects on 4029.

Kanamycin,

Actinomadura antibiotic sensitivity testing 6109.
antibiotic resistance, characterization, plasmid R1 dtd-19 1520.
antibiotic resistance, Escherichia coli, urinary tract clinical isolates 7034.
antibiotic resistance, Pseudomonas aeruginosa 7023.
antibiotic resistance, R factors, Rhizobium japonicum 7875.
antibiotic resistance, Salmonella isolates, Netherlands, incidence 5161.
antibiotic resistance, Salmonella typhimurium clinical isolates 4282.
antibiotic sensitivity testing, Campylobacter fetus subsp. jejuni, clinical isolates 6099.
derivatives, synthesis, antibacterial activity 8853.
drug sensitivity testing, Mycobacterium intracellulare, infection, monkeys, clinical aspects 4285.
+ethionium, antibacterial activity, Pseudomonas aeruginosa, clinical isolates 2523.
Rhizobium japonicum antibiotic resistance isolates, Glycine max nodules 651.
Salmonella clinical isolates, antibiotic sensitivity testing 6112.
Yersinia pestis antibiotic sensitivity testing 6110.

Kanamycin A,

metabolism, Bacillus circulans, amikacin biosynthesis 6157.

Kaolinite,

microorganisms binding, methodology, bioreactors 5357.

Kauranoid,

biosynthesis, Gibberella fujikuroi 968.

Kaurenoid,

biosynthesis, Gibberella fujikuroi 2853.

Kefir,

bacteria, yeasts, morphology 5609.
starter cultures, Streptococcus, Lactobacillus 186.

Kennedia coccinea,

nitrogen fixation, fires, fertilizer applications, phosphorus effects on 517.

Kennedia prostrata,

Australia, Rhizobium isolation, characterization 6990.
nitrogen fixation, fires, fertilizer applications, phosphorus effects on 517.

Kenvia,

bacteria contamination, fishery products 3837.
Cupressus lusitanica, Monochaeta unicomis canker, incidence 4151.
incidence, Vibrio haemolyticus, Pisces, Crustacea 1069.
soil microorganisms, population dynamics, mounds, Isoptera 8669.

Keratin,

degradation, proteinase, Microsporium canis 7367.

Keratinase,

levels, Trichophyton rubrum resistant mutant, undecanoic acid drug resistance 7877.

Keratinophilic fungi,

biodegradation, Pavo cristatus feathers 7555.
enzymes biosynthesis, media (culture), 3630.
incidence, soil, Germany, Fed. Rep. 3185.

Keratinophilic fungi, (continued)

isolation, floors, education institutions 8983.

o-Keto-γ-methyl butyric acid,

production, Providencia immobilized cells 1845

2-Keto-L-gulonate acid,

production, glucose fermentation, Erwinia, corynebacterium 928.

Ketoconazole,

+amphotericin B, antibiotic resistance, Candida albicans 3307.
+ amphotericin B, antifungal activity, Candida albicans 1633.
antifungal activity, Aspergillus flavus 3333.
antifungal activity, Candida albicans, Candida parapsilosis, pH effects on 5201.
antifungal activity, Candida albicans, pH effects on 3334.
antifungal activity, Dematiaceae 7929.
antifungal activity, in vivo, in vitro 5202.
antifungal agents, interaction, antifungal activity 1567.
Candida plasma membranes, effects on potassium release 6061.
derivatives, antifungal activity, Plasmodium falciparum, Candida, clinical isolates 1566.
sensitivity, Actinomycetales clinical isolates 5183.
+sulfamethoxazole, antifungal activity, Candida albicans 2483.
synergism, cotrimoxim, fungicidal activity, effects on membrane permeability 9679.
treatment, Candida albicans infection, man, drug resistance 4274.

Ketoglucuronate dehydrogenase,

purification, characterization, cytoplasmic membranes, Gluconobacter oxydans subsp. melanogenes 4609.

o-Ketoglutarate dehydrogenase,

multienzyme complexes, self-association, light scattering, Escherichia coli 8269.

o-Ketoglutaric acid,

binding glutamate synthase (NADPH), Escherichia coli 5488.

Ketone,

yeasts reduction, use, synthesis, synthons 4515.

Ketones,

reduction, Beauveria sulfurescens 130.

Δ5-3-Ketosteroid isomerase,

photoaffinity labelling, nandrolone, Δ6-testosterone, Pseudomonas testosterone 5469.

3-Ketosteroid-Δ¹-dehydrogenase,

activity, Arthrobacter globiformis, immobilized cells 3688.

Kidney,

lesions, pigs, contamination, Hordeum vulgare, ochratoxin A, Aspergillus ochraceus 7622.

Klebsiella hydratase,

biosynthesis, Phaseolus vulgaris, association pathogenicity, Fusarium 345.

Killer factor,

Candida albicans identification 9991.

Kingella dentrificans,

identification, media (culture), growth inhibition test 9925.

Kinin,

inactivation proteinase, purification, characterization, Psalliotia hortensis 42.

Kirothricin,

Streptomyces cinnamomeus, characterization 1665.

Kitasamycin,

bactenostasis, Mycobacterium avium-intracellulare 7912.

Kitchens,

cooking, bacteria, food contamination, pork 232.
cooking, food contamination, bacteria 235.
cooking, pork, food contamination, Clostridium perfringens, Staphylococcus aureus 1066.
cooking, poultry, spoilage, food contamination, bacteria 1067.
cooking, sanitation, food contamination, bacteria 213.
hygiene, pasta, food poisoning, Clostridium perfringens, man 7576.

Klwithruit,

fungi, post-harvest decay 3104.
post-harvest decay, fungi contamination, USA, California 5031.

Klebsiella,

antibacterial activity, β-lactam antibiotics 4340.
antibacterial activity, antibiotic synergism, clavulanic acid, ticarcillin 6147.
antibacterial activity, cefotetan 4356.
antibacterial activity, cephalosporins 4363.
antibacterial activity, mezlocillin, comparison, penicillins 6141.
antibacterial activity, mezlocillin, penicillins, cephalosporins 9709.
antibacterial activity, nalidixic acid, ciprofloxacin, norfloxacin, piperidic acid 7924.
antibacterial activity, norfloxacin 7062.
antibiotic resistance, clinical isolates 1524.
antibiotic resistance, septicemia, man 645.
antibiotic sensitivity testing 2333.
antibiotic sensitivity testing 6111.
antibiotic sensitivity testing, nosocomial infection, man 6098.
antigen O, polysaccharides structure 8329.
apicalin antibacterial activity 2556.
aztreonam antibacterial activity 777.
bactenocin typing 8137.
capsules polysaccharides, oligosaccharides purification 8335.
capsules, polysaccharides, structure 9197.
carbon sources, factors affecting acetylene reduction 4244.
cefotaxime, moxalactam, antibacterial activity comparison, antimicrobial agents 6126.
cefotetan antibacterial activity 5198.
cefotetan antibacterial activity, Pseudomonas aeruginosa, cefotetan antibacterial activity 7138.
cefuroxime antibacterial activity 6130.
clinical isolates, antibacterial activity, azlocillin 8847.
clinical isolates, antibacterial activity, cephalosporins 9740.
clinical isolates, antibacterial activity, cephotaxim, cephruxim 8830.
clinical isolates, antibacterial activity, sisomicin 3425.
clinical isolates, antibiotic sensitivity testing 728.
conalbumin antibacterial activity, microflora 5181.
distribution, feeds, radiation disinfection 7605.
fensulflothion biodegradation 7538.
isolates, hospitals, antibiotic resistance 8732.
β-lactamase inhibition, ibodopenicillanate, bromopenicillanate 3404.

Klebsiella, (continued)

norfloxacin antibacterial activity 2440.
norfloxacin antibacterial activity 2453.
pathogenicity effects on, *Beta vulgaris* crop production 403.
pili: purification, characterization, adhesion, *Poa pratensis* roots 8660
respiratory tract infection, bekanamycin treatment, man, antibacterial activity 6186.
rhizosphere microorganisms, role, nitrogen nutrition, *Triticum aestivum* 7006.
species, wetwood etiology, *Ulmus americana* 8657.
urinary tract clinical isolates, norfloxacin antibacterial activity 9671.
urinary tract infection, detection, gas chromatography methodology 9929.

Klebsiella aerogenes,
cell membranes, oxalooacetate decarboxylase, purification, characterization 1870.
citrate (pro-35)-lyase active sites chemical modification 3695
 β -lactamase, isoelectric focusing methodology, cellulose acetate membranes 9038.
production, polymers, extraction, methodology 2670.

Klebsiella oxytoca,
cefotetan inactivation β -lactamase 4368.
clinical isolates, antibiotic resistance, cephalosporins 8731.
 β -lactamase inhibitors, cephalosporins synergism 6133.

Klebsiella ozaenae,
contamination, cotton 1320.
disinfectants, antibacterial activity 2434.

Klebsiella pneumoniae,
acetoin reduction, 2,3-butanediol biosynthesis 9232.
antibacterial activity, *Chromobacterium violaceum* antibiotic Y-T0678H 9768.
antibacterial activity, antibiotic synergism, amikacin, cefoxitin, fosfomycin, N-formimidoyl thienamycin 3394.
antibacterial activity, antibiotic synergism, semisynthetic penicillins, aminoglycoside antibiotics 7125.
antibacterial activity, cefaclor, cefadroxil 731.
antibacterial activity, cephalosporins derivatives, structure-activity relationships 8839
antibacterial activity, Cephalosporins derivatives, structure-activity relationships 9840
antibacterial activity, derivatives, kanamycin, dibekacin, ribostamycin 8853.
antibacterial activity, merfloxacin, azlocillin, cephalosporins 6148.
antibacterial activity, piperacillin 9757.
antibacterial activity, polyethylene glycol 8774.
antibacterial activity, Streptomyces melanoviraceus antibiotic DC-52 8344
antibacterial activity, temocillin 5254.
antibiotic sensitivity testing 9722
antibiotic T-1982 antibacterial activity 735.
bacteriocidal activity, cefadroxil, cephalixin 7137.
bacteriocins activity, characterization 3421.
bioassays indicator species, drug sensitivity testing 6039.
2,3-butanediol biosynthesis 8370
cefuroxime, antibacterial activity 1612.
cephalothin, gentamicin, antibiotic synergism, antibacterial activity analysis, methodology 6123

chlorhexidine, noxythiolin, phenoxymethanol, antibacterial activity 6040.
clinical isolates, antibiotic sensitivity testing 7132
comparison Lactobacillus 3-hydroxypropionaldehyde, production 8374.
contamination cotton 1320
enterotoxins physicochemical properties 6715
extracellular polymers adsorption heavy metals, activated sludge 1689
fensulfothion conversion, fensulfothion sulfide biosynthesis, accumulation 8367.
N-formimidoyl thienamycin, antibacterial activity 3430.
fuels production, cellulose hydrolysis 2018
galactonate dehydratase D-fuconate dehydratase, purification, characterization 6439
glucose, cyclic AMP, effects on enzymes 1938.
glycerol dehydratase, kinetics, thermodynamics 7387.
growth, pH, temperature, cooling water, paper mills 7201.
growth, sugar inhibition association wound infection treatment, man, in vitro 7056.
histamine biosynthesis, food poisoning 121.
histamine production, media (culture), seafood 2674
indicator species, association, drinking water, waste water, water sources 797.
inoculation, Sorghum bicolor seedlings roots, carbon compounds exudates 4243.
isolation, milk meat 3826
 β -lactam antibiotics - antineoplastic drugs synergism, antibacterial activity 3385
 β -lactamase inhibitors, cephalosporins synergism 6133.
 β -lactamase isolation, purification 4665
lactic acid biosynthesis 8206
mecillinam: β -lactam antibiotics antibacterial activity 3314.
nitrogen fixation, association, nitrogenase, nif gene 1495
nitrogen fixation, nitrogenase activity, mechanisms 5935
nitrogenase, molybdenum-iron protein E.S.R., ethylene generation 5523.
promiotic acid antibacterial activity 1556
plants extracts antibacterial activity, Iran 2459
production, 2,3-butanediol, hydrolysis, hemi-cellulose 3739
serotypes cephalosporins antibiotic sensitivity testing 4369
serum bacteriocidal activity, amikacin: ceftazidime, cefeprozene: amikacin 3400

sulfonamide susceptibility, association, cotrimoxazole drug resistance 6004
survival, microbial pollution, pulp mills, industrial effluents, lakes 1715
D-tartrate-1,6-bisphosphate adkase, purification, characterization 6427
tannase, tannin decomposition 5600
tetrahydrofolate dehydrogenase, genes, trimethoprim, drug resistance 1522.
tracking, fibrin polymerization 2698

Leptera,
growth, carbon limitations, assimilation enzymes biosynthesis, methanol concentration 6552

Loeckera brevis,
pyridoxine bioassays 2717

Luyveromyces,
ascospores heat resistance, erythromycin inhibition sporulation 1631.
Luyveromyces bulgaricus,
whey production, single cell protein, ethanol 4732
Luyveromyces fragilis,
cheese, whey conversion, single-cell protein production 9286.
compounds reduction 7281
ethanol effects on, thermal injury, growth 8394.

Luyveromyces fragilis, (continued)

ethanol, *Helianthus tuberosus* carbohydrates 2389.
ethanol production, lipids effects on 2866.
inulinase characterization, *Cynara scolymus* inulin hydrolysis 71.
inulinase production, carbon sources effects on, continuous culture 2813.
whey, production, single cell protein, ethanol 4732.

Luyveromyces lactis,
 α -N-acetylglucosaminyltransferase, purification, characterization 2756.
 β -D-galactosidase biosynthesis induction 8556.

Luyveromyces marxiianus,
ethanol inhibition, kinetics 1988.
fermentation, beers, ethanol production 7508.
 β -D-galactosidase, purification, characterization 4658.
inulin effects on, growth, ethanol biosynthesis 3748.
polygalacturonase characterization 8248.

Luyveromyces phaseolusporus,
exo-1,3- β -D-glucanase, self-association 44.
Luyveromyces marxiianus,
contamination, food industry, sugars 184.

Kocle,
mortality, *Erynia phytonomi*, biological control, *Hypera postica* 7485.

Kofic acid,
Aspergillus flavus, production 3648.
biosynthesis, *Aspergillus flavus*, cotton post-harvest decay 5648.

Kofixazole,
biosynthesis, *Rhizobium japonicum*, new records 7435.

Kolanone,

Garcinia kola, fruits extracts, antimicrobial activity 1598.

Korae Rep.,

Mycobacterium tuberculosis clinical isolates, drug resistance 9656.

Kretzschmaria clavus,
infection, *Macadamia integrifolia*, root rot, perithecia relationship 5731.

Kuehneola urenlina,
leaf rust, *Rubus*, weed control, biological control, USA, Hawaii 9410.

Kuwait,
deserts, soil microorganisms, fungal flora, community composition 8673.
Salmonella typhimurium, drug resistance, association, plasmids 5150.

(12Z)-Labda-8(17),12,14-trien-18-ol,
conversion, *Rhodococcus erythropolis* 8438.

(12Z)-Labda-12,14-dien-17-ol-alc acid,
alcohol conversion, *Nocardia restricta* 6617.

Labelling,

antibodies, X radiation probes, diagnosis methodology, salmonellosis 1799.
Escherichia coli β -D-galactosidase use, enzyme immunoassay, S-100 protein measuring techniques, cerebrospinal fluid, man (ATP) use 9860.
tRNA, phase T4, polynucleotide synthetase (AMP) use 9860.

Laboratories,

clinical microbiology, quality control 710.
composting equipment, activity 8951.
decontamination, paraformaldehyde, *Legionella pneumophila*, survival 2459.
effluents, γ radiation, inactivation, viruses 790.
effluents, ozone disinfection 8984.
microbiology, methodology, books 9091.
sampling, airborne bacteria 1729.

Laboratory animals,

environmental hygiene, bacteria 5334.
single-cell protein feeding trials, allergenicity 9283.
toxicity, *Escherichia coli* toxins, gene transfer, phages conjugation 9315.

Laccaria laccata,

ectomycorrhizas, protection *Fusarium oxysporum* root rot, *Pseudotsuga menziesii* 3173.
ectomycorrhizas, suppression root rot, *Fusarium oxysporum*, *Pseudotsuga menziesii* 4144.
growth, cadmium, lead, nickel, effects on 3189.
inoculation, fertilizer applications, seedlings, *Pinus ponderosa*, *Pseudotsuga menziesii* 5852.
mycorrhizas, *Eucalyptus* 1440.

Laccase,

Aspergillus nidulans, purification, characterization 33.
Botrytis cinerea, factors affecting activity 8298.
extraction, soil 4215
hypocotyls Glycine max, infection, *Phytophthora megasperma* f.sp.glycinea 3916.
induction, *Nicotiana tabacum* tissues, tobacco necrosis virus infection 318.
Polyporus versicolor, fluorescence, phosphorescence 7366.
purification, characterization, *Aspergillus oryzae* 936.
purification, characterization, *Pholiota mutabilis* 6407.
Raman spectroscopy, *Polyporus versicolor* 9148.
role hypersensitive response, disease resistance, tobacco mosaic virus, *Nicotiana tabacum* 1874.
Saccharomyces cerevisiae copper thionein complex reconstitution, *Rhus vernicifera* 6497.
Vigna sinensis, *Cucumis sativus*, tobacco necrosis virus infection, osmotic stress effects on 413.
vindole conversion, fungi 7447.

Lachnella villosa,

marasmiac acid, effects on, RNA biosynthesis, DNA biosynthesis 6083.

Lachnella wilkommii,

canker, *Larix laricina* 1465.

canker, *Larix laricina*, USA, Maine 5876.

Lactacin B,

Lactobacillus acidophilus production, antibacterial activity 7172.

 β -Lactam antibiotics,

aminoglycoside antibiotics, synergism, therapeutic applications, antibacterial activity, reviews 6091.
antibacterial activity 4358.
antibacterial activity, *Acinetobacter calcoaceticus* subsp.anitratus,
Acinetobacter calcoaceticus subsp.lwoffii 7979.
antibacterial activity, anaerobic bacteria 4345.
antibacterial activity, bacteria 4340.
antibacterial activity, *Bacteroides fragilis* 2516.
antibacterial activity, *Branhamella catarrhalis*, *Haemophilus influenzae*, association, β -lactamase production, activity 9736.
antibacterial activity, *Chlamydia trachomatis* 5396.

β -Lactam antibiotics, (continued)

antibacterial activity, comparison cefotetan 4357.
antibacterial activity, dose-response effects 743.
antibacterial activity, *Escherichia coli*, *Pseudomonas aeruginosa*, *Streptococcus faecalis*, *Staphylococcus aureus* 4330.
antibacterial activity, *Escherichia coli*, *Streptococcus faecalis* 739.
antibacterial activity, gram-negative bacilli, *Pseudomonas maltophilia* 7983.
antibacterial activity, *Haemophilus influenzae* 7981.
antibacterial activity, *Haemophilus influenzae*, gram-negative bacteria 6119.
antibacterial activity, *Haemophilus influenzae*, *Neisseria meningitidis*, *Streptococcus pneumoniae* 717.
antibacterial activity, *Nocardia*, *Rhodococcus* 2503.
antibacterial activity, penicillin-binding protein, relationship, autolysins activity 6088.
antibacterial activity, *Pseudomonas aeruginosa*, antibiotic resistance, gentamicin, carbenicillin 740.
antibacterial activity, *Pseudomonas aeruginosa*, Enterobacteriaceae 7075.
antibacterial activity, relationship, growth conditions, *Streptococcus faecium* 5249.
antibacterial activity, *Neisseria gonorrhoeae* 3401.
antibiotic resistance, β -lactamase, *Pseudomonas aeruginosa* 7878.
antibiotic resistance, Clostridium perfringens, association, penicillin-binding protein 9651.
antibiotic resistance mechanisms, *Staphylococcus aureus* 3268.
antibiotic resistance, plasmids, *Shigella sonnei* 4278.
antibiotic resistance, reviews 5997.
antibiotic resistance, role membrane permeability, porins, *Escherichia coli* 1542.
antibiotic resistance, *Staphylococcus aureus*, temperature effects on 3282.
antibiotic resistance, *Streptococcus* group D, role, penicillin-binding protein 4273.
antibiotic resistance, *Streptococcus pneumoniae* clinical isolates 3300.
antibiotic sensitivity testing, *Bacteroides* 5115 5262.
antibiotic sensitivity testing, gram-negative bacilli, gentamicin resistance 4342.
antibiotic sensitivity testing methodology, factor affecting 6305.
antibiotic sensitivity testing, *Mycobacterium* 7996.
antibiotic sensitivity testing, relationship treatment, experimental infection, review 9715.
antibiotic sensitivity testing, *Staphylococcus aureus* 7978.
antibiotic sensitivity testing, *Staphylococcus*, clinical isolates 6105.
antibiotic sensitivity testing, *Streptococcus* group B 723.
antibiotic sensitivity testing, *Yersinia enterocolica*, *Bacteroides* corrodens, *Streptococcus pneumoniae* 6089.
antibiotic tolerance, β -lactamase, screening 637.
+antieoplastic drugs, synergism, antibacterial activity, gram-negative bacilli 3385.
bacteria, β -lactamase identification, substrate specificity 9728.
bacterial activity, autolysins deficient mutant, *Bacillus subtilis* 4331.
bioassays, *Bacillus stearothermophilus*, milk 720.
bioassays, *Bacillus stearothermophilus*, milk 721.
biological properties, chemical properties, books 8182.
biosynthesis, association, *Streptomyces clavuligerus* S-(2-aminoethyl)-L-cysteine resistant mutant 8809.
biosynthesis, fungi, recombination, protoplasts fusion 8806.
books 9997.
Campylobacter fetus subsp.jejuni drug sensitivity testing 4292.
carbamapenems, antibacterial activity, *Pseudomonas aeruginosa*, in vitro, in vivo 6216.
Cephalosporium acremonium, biosynthesis, catabolite repression 5231.
characterization, books 8176.
chemical modification 6215.
+5,6-cis-carbapenem, antibiotic synergism, inhibition, β -lactamase, bacteria 883.
comparison, cefotetan antibacterial activity 6134.
derivatives, antibacterial activity, Enterobacteriaceae, hydrolysis stability, β -lactamase 4339.
derivatives, synthesis, antibacterial activity 6097.
diffusion, cell membranes porins, *Escherichia coli*, *Salmonella typhimurium* 718.
Escherichia coli resistant mutant, selection, characterization 5165.
+gentamicin, tobramycin, amikacin, stability, storage 9710.
high-performance liquid chromatography 9713.
inactivation, aminoglycoside antibiotics 6108.
induction β -lactamase, antibiotic resistance, *Proteus vulgaris*, *Proteus rettgeri* 3305.
interaction, bulgecin, effects on, bacteria, morphology 2461.
+ mellicillin antibacterial activity, bacteria 3314.
Nocardia, antibiotic sensitivity testing 2517.
Nocardia asteroides, antibiotic sensitivity testing 3384.
nocardin, biosynthesis, *Actinosynnema mirum* 6200.
nomenclature 2508.
permeability, *Escherichia coli* lipid bilayers 6087.
production screening, bacteria 4337.
resistance, bacteria, genetic analysis, characterization 7883.
resistance, enhancement mechanisms, genetic analysis, *Escherichia coli* 7894.
resistance, *Haemophilus influenzae* strains 4284.
resistance, role, penicillin-binding protein, function, structure, bacteria, reviews 6397.
role, β -lactamase inhibition analysis methodology 6101.
standardization assays 4380.
structure-activity relationships 5236.
+sulfanilamide, synthesis, antibacterial activity 4294.
susceptibility, anaerobic bacteria, association β -lactamase production 5199.
susceptibility, *Haemophilus ducreyi* 6103.
 β -Lactam bacteria
antibacterial activity, N-formimidoyl thienamycin, stability, β -lactamase, comparison cephalosporins 729.
 β -Lactamase
6-acetylmercaptenicillinic acid inactivation, *Escherichia coli* 5248.
6-acetylmercaptenicillinic acid inactivation, mechanisms, *Escherichia coli* 6501.
6-acetylmercaptenicillinic acid inhibition 2754.
Achromobacter, clinical isolates, isolation, characterization 8228.
activity, bacteria, amoxycillin + clavulanic acid 3411.
activity, *Escherichia coli*, relationship, antibiotic resistance, ampicillin, cephalothin 7028.
activity, *Haemophilus influenzae*, detection methodology 7318.

β -Lactamase, (continued)

activity, penicillins antibacterial activity, *Pseudomonas*, disc-diffusion test, interpretation 6145.
activity, role, Enterobacter cloacae cephalosporins antibiotic resistance 7036.
activity, *Staphylococcus* 973.
ampicillin, *Haemophilus influenzae* type b, clinical isolates 653.
antibacterial activity, cefotetan 4364.
antibiotic SQ 26,917 stability 8039.
antibiotic tolerance, β -lactam antibiotics, screening 637.
assays, gram-negative bacteria, gram-positive bacteria 5506.
bacteria, isoelectric focusing methodology, cellulose acetate membranes 9038.
bacteria, moxalactam induction, comparison cephalosporins, cefoxitin 5273.
Bacteroides, role, antibiotic resistance, purification, characterization 4594.
biosynthesis, *Bacteroides*, characterization 5518.
cefotetan antibacterial activity 4363.
cefotetan inactivation, *Klebsiella oxytoca*, *Proteus vulgaris*, *Escherichia coli* 4368.
5,6-cis-carbapenem + β -lactam antibiotics, antibiotic synergism, inhibition, bacteria 1883.
Citrobacter freundii, ceftriaxone inhibition 3397.
Citrobacter freundii, inactivation, sulbactam 7180.
Clostridium butyricum, purification, characterization 1892.
detection, assays, *Neisseria gonorrhoeae* 5407.
detection methodology, anaerobic bacteria 9037.
Enterobacter cloacae, release, beads extraction 2806.
Escherichia coli, antibacterial activity, cefotetan 4370.
Escherichia coli, purification, characterization 2787.
Escherichia coli, uptake, association, antibiotic resistance, cephalosporins 9644.
gram-negative bacteria, antibacterial activity, cloxacillin + ampicillin, cloxacillin + cephalosporins 1610.
guanidine hydrochloride, biguanide hydrochloride derivatives denaturation, *Staphylococcus aureus* 3702.
Haemophilus influenzae, antibiotic resistance, plasmids characterization, transfer 644.
Haemophilus influenzae, antibiotic resistance, role ampicillin 2400.
hydrolysis, cefotetan stability 4364.
hydrolysis, cefotetan stability 4366.
hydrolysis stability, cefotetan, β -lactam antibiotics derivatives 4339.
identification, substrate specificity, bacteria, β -lactam antibiotics 9728.
inactivation, moxalactam 4673.
induction, cephalosporins antagonism, N-formimidoyl thienamycin, cefoxitin, *Aeromonas hydrophila*, *Serratia marcescens* 7059.
inhibition analysis methodology, role, inhibitors, β -lactam antibiotics 6101.
inhibition, bacteria fatty acids 6152.
inhibition, bacteria, iodopenicillanate, bromopenicillanate 3404.
inhibition, clavulanic acid analogs 6214.
inhibition, clindamycin, Enterobacter, *Pseudomonas aeruginosa* 7155.
inhibitors, cephalosporins synergism, bacteria 6133.
inhibitors, 6-acetylmercaptenicillinic acid, +ampicillin, piperacillin, ceftriaxone, antibacterial activity 3405.
isoelectric focusing, *Citrobacter diversus*, *Branhamella catarrhalis* 8292.
isoelectric focusing, *Escherichia coli*, *Pseudomonas aeruginosa* 7383.
isozymes, fractionation, chromatofocusing, *Bacillus cereus* 9165.
isolation, bacteria, purification 4665.
isoxazole penicillins inactivation 2544.
 β -lactam antibiotics, antibiotic resistance, *Pseudomonas aeruginosa* 7878.
 β -lactam bacteria, N-formimidoyl thienamycin stability, antibacterial activity, comparison cephalosporins 729.
mechanisms, *Pseudomonas aeruginosa*, *Escherichia coli* 86.
Morganella morganii, hydrolysis, cephalosporins, derivatives, structure-activity relationships 5241.
Neisseria gonorrhoeae, clinical isolates, antibiotic resistance 3295.
phenylglyoxal inactivation, *Bacillus cereus* 948.
precursors bioaccumulation, *Escherichia coli*, association globomycin treatment 7350.
production, activity, *Branhamella catarrhalis*, *Haemophilus influenzae*, association, antibacterial activity, β -lactam antibiotics 9736.
production, anaerobic bacteria, association β -lactam antibiotics susceptibility 5199.
production, characterization, *Branhamella catarrhalis* 8288.
production, plasmids mediation, *Escherichia coli*, screening methodology 3594.
Proteus rettgeri, *Proteus vulgaris*, β -lactam antibiotics induction, antibiotic resistance 3305.
Pseudomonas aeruginosa, biosynthesis, genetic analysis 8287.
Pseudomonas aeruginosa, hydrolysis, cefotaxime, cefaclorin 4355.
Pseudomonas aeruginosa, hydrolysis susceptibility, moxalactam 5272.
purification, characterization, *Mycobacterium smegmatis* 3690.
purification, kinetics, *Citrobacter freundii*, *Escherichia coli*, Enterobacter cloacae 9140.
stability, antibiotic E-0702, antibacterial activity 8833.
stability, antibiotic U-53196E, antibacterial activity, new records 8832.
stability, ceftriaxime 2536.
stability, mezlocillin, piperacillin 2543.
stability, oxyminocephalosporins 2538.
Staphylococcus aureus, antibiotic resistance, penicillins, erythromycin 3290.
Streptomyces, purification, characterization 7397.
suicide inhibitors, gram-negative bacteria 2810.
susceptibility, cefotetan, antibacterial activity 4378.
temocillin stability 2550.
Lactamides
alkaloids, *Nocardia restricta*, I.R. spectroscopy 8373.
Lactarins nector
aqueous extracts, Ames test 8467.
3,12-dihydro-3-deoxyactarum A, isolation, structure 112.
3,12-dihydro-3-deoxyactarum A, isolation, structure 977.
extracts, mutagenicity testing 4715.
mutagenicity, mutagens characterization 2916.
Lactate dehydrogenase
+ Alkaligenes eutrophus hydrogen dehydrogenase, immobilized enzymes, use, NADH regeneration 8314.
Alkaligenes eutrophus, purification, characterization 6488.
allosteric properties, E.S.R., *Lactobacillus casei*, *Lactobacillus curvatus* 39.
amino acid sequence, *Lactobacillus casei* 8278.
ATP, ADP, AMP inhibition, *Phycomyces blakesleeana* 1905.
purification, characterization, *Alkaligenes eutrophus* 4351.

Lactate dehydrogenase, (continued)

purification, characterization, *Streptococcus cremoris* 4642.

Lactate dehydrogenase (cytochrome),

subunits, characterization, purification, *Hansenula anomala* 4623.

Lactate 2-monooxygenase,

reconstitution flavin derivatives, oxidation decarboxylation lactic acid, *Mycobacterium smegmatis* 6502.

Lactic acid,

biosynthesis, aerobic bacteria 8206.

biosynthesis, *Lactobacillus vaccinostercus* sp. nov., calcium alginate immobilized cells 4565.

carbon sources, *Rhodospseudomonas capsulata*, hydrogen production 7469.

fermentation, lactic acid bacteria, vegetables 5607.

fermentation, *Streptococcus*, milk products meat methodology 5426.

fermentation, tomatoes, *Lactobacillus plantarum* 4833.

oxidation decarboxylation, lactate 2-monooxygenase reconstitution flavin

derivatives, *Mycobacterium smegmatis* 6502.

production, Gramineae crop residues, *Lactobacillus plantarum* effects on 5623.

production, *Lactobacillus delbrueckii*, fermenters 11.

role, antagonism, association, metronidazole antibacterial activity, *Trichomonas vaginalis* 7090.

sensors, lactic acid bacteria enumeration methodology 3584.

substrates, *Rhodospseudomonas capsulata*, hydrogen production 8386.

yogurt, effects on *Salmonella typhimurium* growth 4811.

D-Lactic acid,

enantiomers, formation, lactic acid bacteria, cheddar cheese 8463.

Lactic acid bacteria,

activity relationship, milk trace elements 8477.

adonitol, protection, freeze-drying 2686.

antibiotic F 16-2 antimicrobial activity, association sake 8024.

association cold storage food preservation 260.

carbohydrates metabolism, reviews 9125.

casein proteolysis 4800.

enumeration methodology, lactic acid sensors 3584.

foods, effects on intestinal microflora, domestic animals 3850.

fermentation, milk + colostrum, food sources, juveniles, cattle 7599.

fermentation, sauerkraut 5608.

formation, D-lactic acid enantiomers, cheddar cheese 8463.

identification, assays 895.

incidence, ethanol fermentation, wine storage 9243.

inoculation, shellfish, vacuum packaging, *Vibrio* spoilage 8495.

isolation, effects on, fermentation, *Beta vulgaris*, silage 3854.

isolation, identification, aromatic compounds production, milk 1068.

lactic acid fermentation, vegetables 5607.

pasteurized milk, cheese production, organoleptic evaluation 6662.

phages, survival, cold storage 8103.

proteolysis, cheese ripening, organoleptic evaluation 7584.

ripening, cheese production, soybean milk, organoleptic properties 3823.

silage production, fermentation 8490.

spoilage, poultry, packaged food, carbon dioxide, oxygen, cold storage 6686.

starch, fermentation control 8412.

starter cultures, acid production, sourdough 5620.

starter cultures, fermentation, soybean milk 216.

starter cultures, freeze drying, viability 3678.

starter cultures levels, organoleptic evaluation, cheese 3822.

starter cultures, sugar fermentation, soybean milk 6674.

starter cultures temperature, buttermilk production 4802.

Streptococcus, plasmids DNA isolation 9047.

+ *Streptococcus thermophilus*, galactose fermentation, cheese production 8461.

uranium leaching, phosphorites 3255.

temperature effects on, ripening, cheese 8460.

Lactobacillus,

activity, threonine aldolase, alcohol dehydrogenase, effects on milk flavor 7587.

antibiotic sensitivity testing, antibiotic resistance 8724.

association *Streptococcus thermophilus*, enumeration, media (selective) + maltose

3571.

benzocoin antibiotic sensitivity testing, relationship, taxonomy 1659.

comparison, *Klebsiella pneumoniae*, 3-hydroxypropionaldehyde, production 8374.

contamination, *Xiphias gladius*, fishery products, packaging, chemistry 4808.

corn + animal wastes silage, fermentation, biochemical characteristics 4868.

films permeability, vacuum packaging, beef spoilage 5635.

fishery products, storage conditions, carbon dioxide, nitrogen, temperature,

effects on 8498.

food contamination, beef vacuum packaging, oxygen barriers films 261.

food contamination, ripening, salami 2030.

identification, Mintek test 9051.

inactivation, food spoilage rates, incubation temperature effects on 2926.

incidence, ethanol fermentation, wine storage 9243.

intestinal microflora, salicylmycin administration effects on, pigs 5624.

levels, cheese ripening, cheese flavor, chemical analysis 2906.

peptides hydrolase, production, factors affecting 1941.

periodontal diseases isolates, antibiotic sensitivity testing 3376.

production, acetoin, 2,3-butanedione, pyruvic acid effects on 4721.

prohistidine decarboxylase, histidine decarboxylase conversion, peptides bonds

cleavage 4595.

+ *Propionibacterium*, mixed culture, growth 2917.

spoilage, frankfurters, pork, gases composition, storage 5639.

spoilage, meat, vacuum packaging, carbon dioxide packaging 4879.

spoilage, onions, beets, vacuum packaging 4882.

starter cultures, kefir 186.

Lactobacillus acidophilus,

activity, threonine aldolase, alcohol dehydrogenase, effects on milk flavor 7587.

antibiotics, purification, characterization 9776.

casein proteolysis 4800.

dental cement + chlorhexidine gluconate antibacterial activity 677.

food wastes fermentation, antiviral activity 7595.

ice cream, health, man 4836.

lactacin B production, antibacterial activity 7172.

milk, heat treatments effects on 6664.

milk, lactose digestion, intestinal microflora, man, 7581.

milk, lactose digestion, intestinal microflora, man, 7581.

production, acetoin, 2,3-butanedione, pyruvic acid effects on 4721.

purification, characterization, proteins antibiotics 6207.

rumen microorganisms, avoparcin effects on growth 8035.

starter cultures, yogurt 2914.

Lactobacillus acidophilus, (continued)

whay media (culture) 8146.

Lactobacillus brevis,

production, acetoin, 2,3-butanedione, pyruvic acid effects on 4721.

use, biological control, *Brochothrix thermosphacta* food contamination, meat

products *Lactobacillus* 4835.

Lactobacillus brevis var. lindieri,

acid production, starter cultures, sourdough 5620.

Lactobacillus bulgaricus,

activity, threonine aldolase, alcohol dehydrogenase, effects on milk flavor 7587.

casein proteolysis 4800.

effects on, ripening, cheese 200.

β -D-galactosidase immobilization, polyacrylamide gels 9176.

β -D-galactosidase, immobilized enzymes, activity preservation 7394.

β -D-galactosidase, immobilized enzymes, use egg shells carriers 9138.

production, anti leukemia agents 5544.

protease effects on milk proteins 4796.

γ radiation induction mutants, acid production, proteolytic enzymes activity,

milk 8200.

starter cultures, antimicrobial activity, vitamins, -D-D-galactosidase activity,

yogurt 7591.

starter cultures, fermentation, soybean milk 216.

+ *Streptococcus thermophilus*, galactose fermentation, cheese production 8461.

+ *Streptococcus thermophilus*, mixed culture, yogurt fermentation effects on

sugars 3829.

Streptococcus thermophilus, yogurt starter cultures, relationship, milk 3848.

Lactobacillus casei,

contamination, cheese production 9274.

folacin, food contamination, chromatography 4781.

p-halo-DL-phenylalanine derivatives, antibacterial activity, structure-activity

relationships 7085.

lactate dehydrogenase, allosteric properties, E.S.R. 39.

lactate dehydrogenase, amino acid sequence 8278.

polyglutamate synthetase, purification, characterization 67.

production, acetoin, 2,3-butanedione, pyruvic acid effects on 4721.

γ radiation induction mutants, acid production, proteolytic enzymes activity,

milk 8200.

rumen microorganisms, avoparcin effects on growth 8035.

tetrahydrofolate dehydrogenase interaction methotrexate analogs, fluorescence

2801.

tetrahydrofolate dehydrogenase, NADP⁺, thioNADP⁺ binding, nuclear

Oxidation 2761.

thymidylate synthase, N.M.R. 2759.

use, measuring techniques, folic acid content, foods 7238.

Lactobacillus casei subsp. rhamnosus,

inactivation, food spoilage rates, incubation temperature effects on 2926.

Lactobacillus confusus,

cell disruption, methodology glass beads 6337.

Lactobacillus curvatus,

lactate dehydrogenase, allosteric properties, E.S.R. 39.

Lactobacillus delbrueckii,

lactic acid production, fermenters 11.

Lactobacillus fermentum,

heat resistance, pectin protection, tomatoes juices 6660.

Lactobacillus acidophilus lactacin B antibacterial activity 7172.

production, acetoin, 2,3-butanedione, pyruvic acid effects on 4721.

Lactobacillus helveticus,

effects on, ripening, cheese 200.

Lactobacillus acidophilus lactacin B antibacterial activity 7172.

+ *Streptococcus thermophilus*, galactose fermentation, cheese production 8461.

yogurt, whey proteins effects on 4813.

Lactobacillus lactis,

effects on, ripening, cheese 200.

+ potassium sorbate, inhibition growth, psychrotrophic bacteria, milk 7579.

Lactobacillus leichmannii,

use, folic acid, cyanocobalamin, serum levels, man, bioassays 885.

Lactobacillus murinus,

β -D-galactosidase purification, characterization 9161.

isocitrate lyase, purification, characterization 7336.

Lactobacillus plantarum,

amino acids biodegradation 7549.

antibacterial activity, oleuropein hydrolysis products 7925.

fermentation, *Olea europaea*, heat treatments, factors affecting 7592.

fermentation, sausages, spices effects on 2056.

Gramineae crop residues, effects on lactic acid production 5623.

lactic acid fermentation, tomatoes 4833.

lactic acid fermentation, vegetables 5607.

phages, starter cultures, meat, isolation, characterization 6676.

silage fermentation 9282.

starter cultures, continuous culture, methodology 6343.

use, biological control, *Brochothrix thermosphacta* food contamination, meat

products *Lactobacillus* 4835.

viability, freezing, freeze drying 8116.

Lactobacillus sakei,

antibiotic F 16-2 resistant mutant screening 7896.

Lactobacillus vaccinostercus sp. nov.,

lactic acid biosynthesis, calcium alginate immobilized cells 4565.

Lactobacillus viridescens,

use, biological control, *Brochothrix thermosphacta* food contamination, meat

products *Lactobacillus* 4835.

Lactobacillus xylosum,

α -hydroxysteroid dehydrogenase, purification, characterization 5525.

Lactoferrin,

antibacterial activity, relationship microflora immune response, Mammalia,

reviews 5176.

interaction, nitrite, inhibition, *Bacillus cereus*, sporulation 3329.

Lactones,

linkage, localization, *Bacillus subtilis* 3'-5'-cyclic-nucleotide

phosphodiesterase inhibitor 7304.

sessquiterpenes, *Helianthus annuus*, antimicrobial activity 7953.

Lactoperoxidase,

+ hydrogen peroxide + thiocyanate effects on cheese fermentation 4809.

Lactose,

digestion, intestinal microflora, *Lactobacillus acidophilus* milk, man 7581.

fermentation, *Bacteroides polypragmatus* 2864.

Lactose, (continued)

- fermentation, *Streptococcus lactis* mutants, starter cultures, cheddar cheese production 7570.
- hydrolysis, β -D-galactosidase, fungi, use yogurt production, skim milk 7569.
- induction *Kluyveromyces fragilis* β -D-galactosidase biosynthesis 6556.
- milk products, fermentation effects on 4855.
- solutions, heat sterilization, *Thermomonospora* growth inhibition 2907.
- whey, hydrolysis, β -D-galactosidase 8471.
- Lactoyl-glutathione lyase,**
glutathione derivatives inhibition, yeasts 84.
substrate specificity, mechanisms, yeasts 7368.
- Lactuca,**
Bremia lactucae disease resistance 6865.
- Lactuca saligna,**
disease resistance, pathogenicity, Cucumber mosaic virus, genetic analysis 3135.
- Lactuca sativa,**
beet yellows virus infection, disease transmission, *Tnlaeureos vaporariorum* 9431.
big vein disease, lettuce big vein virus, methyl bromide, carbendazim, disease control 6889.
Bremia lactucae infection, penetration, pathogenesis 8587.
Bremia lactucae infection, virulence, USA, New York 402.
disease resistance, association, virulence, *Bremia lactucae*, downy mildew 6820.
disease resistance, downy mildew, *Bremia lactucae* 8609.
disease resistance, genes, downy mildew, *Bremia lactucae* 3126.
downy mildew, *Bremia lactucae*, metalaxyl disease control 5837.
downy mildew, *Bremia lactucae*, virulence assays 3091.
metham sodium, disease control, lettuce drop, *Sclerotinia minor* 4002.
necrotic yellows virus, detection, enzyme-linked immunosorbent assay, vectors, *Hyomomyces lactucae* 415.
pathogenicity, *Sclerotinia sclerotiorum*, sclerotia pigmentation 6830.
rhabdovirus infection, cytology 1234.
root, plant diseases, fungi, bacteria 9411.
seeds, lettuce mosaic virus detection, enzyme-linked immunosorbent assay, USA, Florida 5017.
seeds, radioimmunosorbent test detection lettuce mosaic virus 1754.
soft rot, *Erwinia carotovora* subsp. *carotovora*, pathology 9384.
symbiosis, *Glomus mosseae*, nitrate, phosphate, effects on 5903.
- Laetisaria arvalis,**
isolation, soil, media (selective) 4212.
- Laetisaria luciformis,**
infection, Gramineae, pathogenesis 3933.
infection, Gramineae, symptoms 3014.
infection, relationship soil fertility, *Lolium perenne*, *Festuca rubra* 9357.
- Legenaria vulgaris,**
fruit rot, *Botryodiplodia theobromae*, phenols levels 7718.
- Lagenidium,**
triparanol transformation, metabolites 1965.
- Lagenidium giganteum,**
biological control, *Aedes taeniorhynchus* 2834.
biological control, pest control, *Culicidae* 1014.
biological control, survival, overwintering, paddy fields, infectivity, *Culicidae* 865.
toxicity, insecticides, herbicides, fungicides 6060.
zoospores production, liquid culture 1816.
- zoospores, production, media 8162.
- Lagomorpha,**
seedling damage, Cronartium, blister rust, *Pinus* 2318.
- Lagoana,**
animal wastes, waste treatment, bacteria population dynamics 4434.
sewage effluents, anaerobic conditions, *Thiopia rosea* flocculation 8064.
- Lagois,**
Streptomyces, comparison, phytochromin, copogycin, physicochemical properties, biological properties 2591.
- Lakes,**
aromatic compounds mineralization, bacteria 2008.
bacteria distribution, Italy, seasonal variations 7203.
microbial pollution, *Klebsiella pneumoniae* survival, industrial effluents, pulp mills 1715.
mines drainage, effects on, bacteria, community structure 8068.
polar environments, acids effects on plant debris biodegradation, microorganisms 1995.
polar environments, microorganisms succession, leaf litter decay 1061.
Salmonella, microbial pollution 1723.
sediments, bacteria, delahogation, halogenated aromatic compounds 6648.
sediments, bacteria, factors affecting methanogenesis 624.
sediments fatty acid composition, organic compounds biodegradation, bacteria 7553.
USA, Alaska, *Carex* plant debris, biodegradation, nutrient enrichment effects on 2023.
USA, Washington, nitrogen cycle, volcanoes, environmental impact, effects on bacteria 5122.
- Lamellicolic anhydride,**
Verticillium lamellicola, characterization 8378.
- Laminar air flow,**
prophylaxis, postoperative infection, man 3497.
safety cabinets, safety regulations, pathogens 5337.
safety equipment, bacteria assays 5332.
- Laminum amplexicaule,**
disease reservoirs, tomato ringspot virus, prunus 1209.
- Lamoxactam,**
antibacterial activity 3399.
antibacterial activity, disc-diffusion test 9741.
antibacterial activity, *Pseudomonas aeruginosa*, agar diffusion test 728.
- Land disposal,**
composting, industrial wastes, reviews 6242.
crop residues, food processing solid wastes, soil microorganisms decomposition, reviews 5981.
industrial wastes, oil and gas industry, soil microorganisms biodegradation, selenium 5983.
industrial wastes, pathogens inactivation, occupational exposure risks, reviews 5978.
industrial wastes, soil microorganisms biodegradation, books 6360.
organic compounds, toxicants, decomposition, soil microorganisms, reviews 5977.
pharmaceuticals industrial wastes, soil microorganisms decomposition, reviews

Land disposal, (continued)

5984.
sewage sludge, salinity effects on decomposition, nitrogen, mineralization 9555.
solid wastes, soil microorganisms decomposition, reviews 5976.
- Land reclamation,**
forests soil, analysis, microorganisms, enzymes 7822.
mines, ectomycorrhizas effects on revegetation, *Pinus taeda* 2305.
mines, ectomycorrhizas spores abundance, rhizosphere, trees 9541.
mines, *Phaeosulcus vulgaris* inoculation, *Rhizobium phaseoli*, nitrogen fixation 5108.
mines, *Pinus taeda*, mycorrhizas, soil amendment, revegetation 2302.
mines, revegetation, mycorrhizas inoculation, *Coniferaleae* 519.
revegetation, mines, soil amendment, vesicular-arbuscular mycorrhizas colonization roots. *Agropyron trachycarpus* 9542.
vesicular-arbuscular mycorrhizas, inoculum production, nutrient uptake 9540.
- Landfills,**
methanogenesis, waste disposal 4263.
- Langerhans cells,**
isolation methodology, association, immunosorption, use, *Staphylococcus aureus* 5395.
- Lapachol,**
antiviral activity 7106.
- Larix,**
defoliation, association fungi, *Adelges* grazing 540.
- Larix decidua,**
needlecast, *Mycosphaerella laricina*, new records, USA 9527.
- Larix laricina,**
canker, *Lachnellula wilkommii* 1465.
Lachnellula wilkommii canker, USA, Maine 5876.
- Larix leptolepis,**
shoot blight, *Guignardia laricina*, association, phytoalexins 4161.
- Larvae,**
Adoxophyes orana, biological control, nuclear polyhedrosis virus 6358.
Aedes aegypti, *Bacillus thuringiensis* subsp. *israelensis* treatment pathogenesis 3721.
Aedes aegypti, biotrol activity, *Bacillus thuringiensis*, *Bacillus sphaericus* cell culture 7486.
Aedes aegypti, biological control activity, *Bacillus thuringiensis*, *Bacillus sphaericus* cell culture 8349.
Aedes aegypti, biological control, *Bacillus thuringiensis* crystals, potassium carbonate effects on 4717.
Aedes aegypti, biological control, histopathology, δ -endotoxin, *Bacillus thuringiensis* 1019.
Agrotes segetum, mass rearing, production, granulosis virus, biological control 9211.
Anopheles stephensi, biological control, *Bacillus sphaericus*, heat inactivation 6612.
Bombyx mori, midgut cells, *Bacillus thuringiensis* toxins pathogenesis 3738.
Culex fatigans, toxicity, histopathology, *Bacillus sphaericus* 8363.
Culicidae, biological control, association *Bacillus thuringiensis* subsp. *israelensis* plasmids 2842.
Culicidae, biological control, *Bacillus sphaericus* 6611.
Culicidae, biological control, use *Bacillus thuringiensis* δ -endotoxin toxicity, stability 234.
Culicidae, lethality, association, *Bacillus thuringiensis* var. *israelensis* toxins biosynthesis, factors affecting 306.
Culicimomyces, biological control, pathogens, fungi 1013.
Epirrhia, biological control, *Beauveria* 985.
Heliothis virescens, biological control, baculovirus 4719.
Otiorynchus sulcatus, biological control, *Metarhizium anisopliae* 985.
Platynota idaeusalis, *Bacillus thuringiensis* subsp. *kurstaki* toxicity, association formaldehyde dietary intake 7498.
Spodoptera maximus, infection treatment, antibacterial agents, *Brachionus plicatilis*, food sources, aquaculture 7609.
Sintom damnosum, biological control, *Bacillus thuringiensis*, field trials 6609.
Simulium damnosum, biological control, *Bacillus thuringiensis*, storage, tropical environment 6610.
Spodoptera exigua, *Paeclimomyces farinosus* infectivity, field trials 7504.
toxicity, pest control, *Bacillus thuringiensis*, *Culicidae* 297.
toxins, histopathology, midgut, *Bacillus sphaericus*, *Culicidae* 1022.
- Larvicides,**
biological control, factors affecting, *Bacillus thuringiensis*, *Culex quinquefasciatus*, *Aedes aegypti*, *Anopheles albimanus*, *Anopheles quadrimaculatus* 8380.
pesticide applications, equipment, methodology, *Bacillus thuringiensis*, *Culicidae* 9204.
- Laser,**
nephelometry, automated methods, use, bacteria antibiotic sensitivity testing 9737.
- Lasiobolidium orbiculoides,**
cellulose decomposition 2879.
- Lasmodiophora brassicae,**
races, detection, association, clubroot, USA 3977.
- Lasus fever virus,**
glycoproteins, detection, concanavalin A, methodology 3541.
indirect fluorescent antibody test, use β -propiolactone 3534.
- Latamoxef,**
synthesis, antibacterial activity 4407.
- Late blight,**
fungicides, disease control, *Solanum tuberosum* 1388.
pathogenesis, *Lycopersicon esculentum*, role, sterol composition, light intensity effects on 5785.
Phytophthora infestans, adaptability, disease resistance, *Solanum tuberosum* 8621.
Phytophthora infestans, disease spread, *Solanum tuberosum*, mathematical models 538.
Phytophthora infestans, fungicides, applications, *Solanum tuberosum* 4106.
Phytophthora infestans, fungicides resistance, measuring techniques, in vitro, *Solanum tuberosum* 7891.
Phytophthora infestans, *Lycopersicon esculentum* 8572.
Phytophthora infestans, prediction, use, disease resistance, weather, effects on, fungicides, *Solanum tuberosum* 8622.
Solanum tuberosum, epidemics, Africa, East 420.
Solanum tuberosum, epidemics, USA, Washington 1267.
- Laterimulosa uni-inflata,**
cellulose decomposition 2903.

Latex agglutination,

antigens detection, *Streptococcus* group B, amniotic fluid, monkeys 9938.
blood donors, *Clostridium tetani*, tetanus toxin antibodies 3621.
Cryptococcus antigens, proteinase effects on interference factors 9992.
detection, antigens, *Neisseria meningitidis*, *Haemophilus influenzae* 2663.
detection, *Haemophilus influenzae* cerebrospinal fluid, meningitis diagnosis 9941.
detection, rotavirus (human), feces, man 9864.
diagnosis, meningitis 9957.
diagnosis, *Neisseria meningitidis*, *Haemophilus influenzae*, meningitis, man 3597.
identification, *Legionella pneumophila* 9911.
identification, *Streptococcus*, blood culture 5412.
immune status determination, rubella, man 9842.
methodology, *Staphylococcus aureus* identification 7235.
Streptococcus, false-positives 9922.

Latyrhus odoratus,

diagnosis, disease transmission, pea enation mosaic virus, *Acyrtosiphon pisum* 342.
vectors, *Latyrhus odoratus*, pea enation mosaic virus 342.
phytoalexins production association *Botrytis cinerea* infection 6846.
rhizosphere, soil properties, fungistasis 558.

Latin America,

agricultural practices, research programs, symbiosis, Leguminosae, *Rhizobium*

Hemilea vastatrix, leaf rust, epidemiology, coffee arabica 1216.

hospitals, washing, water temperature effects on bacteria 3498.

preservatives, food contamination, spoilage, meat products 270.

lung, effects on *Escherichia coli* 682.

mining, bacteria, ores, mining 5135.

decomposition, plant debris, soil microorganisms, *Trifolium* 566.

heavy metals, heterotrophic microorganisms, screening methodology 3256.

sulfide, bacteria 9627.

uranium, phosphorites, heterotrophic microorganisms 3255.

bacteria uptake, wastewater treatment 5313.

Bacteroides susceptibility 681.

content, rhizosphere microorganisms, rhizoplane microorganisms, soil, USSR 2334.

effects on ammonification, nitrification, nitrifying bacteria, soil pollution

2336.

pollution, effects on ectomycorrhizas, growth 3189.

pollution, effects on, soil properties, humus, enzymatic activity, metabolism

2326.

Leaf blight,

Alternaria alternata, *Eclipta alba* 8571.

bacteria, etiology, *Zizania aquatica* 5702.

Cercospora carotae, disease control, foliar applications, spraying equipment,

Daucus carota 9484.

Colletotrichum dematium, *Abelmoschus esculentus*, pathogenesis 9412.

Cucumis melo, disease control, factors affecting pesticide applications 3150.

Drechslera maydis, *Cochliobolus heterostrophus*, *Zea mays*, Tanzania 7673.

Drechslera turcica, medicinal plants extracts antifungal activity, *Zea mays* 7756.

Erwinia chrysanthemi, nitrogen sources effects on, *Philodendron sellowii* 1298.

Exserohilum turcicum, disease resistance, H₂N gene, *Zea mays* 5710.

Exserohilum turcicum, pathogenesis, *Zea mays*, USA, Ohio 7668.

Exserohilum turcicum, races, virulence, *Zea mays*, USA 3363.

Exserohilum turcicum, *Zea mays*, factors affecting 5717.

Exserohilum turcicum, virulence, disease resistance, Ht gene, *zea mays* 1370.

Fusarium oxysporum, pathology, *Catharanthus roseus* 3094.

Oryza sativa, phenylalanine ammonia-lyase, tyrosine ammonia-lyase, levels 384.

Pseudomonas pseudoalcaligenes subsp. *konjaci*, pathogenesis, *Amorphafulva konjaci*

7716.

Xanthomonas campestris pv. *oryzae*, subsp. *konjaci*, pathogenesis, *Oryza*

sativa 6750.

Xanthomonas oryzae, *Oryza sativa*, disease resistance, gemplasm analysis 5811.

Zea mays, factors affecting epidemiology 6772.

Zea mays gemplasm, incidence 2131.

Leaf blotch,

Botrytis cinerea, *Solanum tuberosum* 2213.

Coniella granati, *Pestalotiopsis versicolor*, *Punica granatum* 7680.

Leptotrichia medicaginis, *Medicago sativa*, USA, Wyoming 9330.

Rhynchosporium loliae, pathology 6768.

Rhynchosporium secalis, disease control, fungicides, plant breeding, crop

timing 488.

Rhynchosporium secalis, *Hordeum*, disease control, antifungal agents treatment

5728.

Rhynchosporium secalis, *Hordeum vulgare* 5730.

Septoria tritici, disease resistance, plant breeding, height, *Triticum aestivum*

454.

Leaf litter,

Acer rubrum, decomposition, soil microorganisms, flooding, nutrient dynamics

4194.

biodegradation, polygalacturonase, *Hyphomycetes* 2003.

decay, microorganisms succession, polar environments, lakes 1061.

decomposition, bacteria, carbon, nitrogen production, *Fagus sylvatica*,

coniferaleae, association, climate 2221.

decomposition, forest floor, *Basidiomycetes* 1444.

decomposition, forest floor, fertilizer applications effects on, *Tsuga*

heterophylla 6897.

decomposition, forests, measuring techniques, eucalyptus 1447.

decomposition, fungi mycelia, *Collemboles* grazing effects on, nitrogen, cations

leaching 3212.

decomposition, nitrogen balance, nutrient dynamics, *Pinus sylvestris* 3161.

decomposition, nitrogen cycle, *Coffea* plantations 3218.

decomposition, nitrogen cycle, energy flow, forests 2306.

decomposition, nitrogen cycle, forests 528.

decomposition, nitrogen cycle, forests 2308.

decomposition, nitrogen cycle, plantations, *Theobroma cacao* 3219.

decomposition, nutrient dynamics, forests, *Pinus sylvestris*, Sweden 2300.

decomposition, nutrient dynamics, mineralization, forests 2294.

decomposition, *Nymphoides peltata*, *Pythium* 5070.

decomposition, organic matter, *Pinus sylvestris* 2299.

decomposition, population levels, soil microorganisms, forests 5855.

decomposition, role saprophytes, *Abies alba* 6906.

Leaf litter, (continued)

decomposition, soil microorganisms, analytical techniques 2351.

decomposition, soil microorganisms, nitrogen cycle 2362.

decomposition, soil microorganisms, nutrient availability, sulfur, acid rain,

pollution effects 9507.

decomposition, tropical environment, forests, Guyana 8447.

Dictyosphaera, ecological distribution, forest floor 5849.

Eucalyptus, biodegradation, relative humidity, substrates water content effects

on 153.

fungi, colonization, biodegradation 3771.

fungi decomposition, *Abies alba* 2301.

fungi, nutrient cycles, ecosystem analysis 5899.

fungi, species composition, population levels, forests, tropical environment

1443.

microorganisms biomass determination methodology 3513.

nutrient dynamics, forest floor, *Pinus contorta* subsp. *latifolia*, USA, Wyoming

9556.

Pinus radiata, stands, fungi, biodegradation 3796.

Pinus, soil microorganisms, methyl bromide, dazomet, effects on 3250.

Populus tremuloides, biodegradation, fungi 8045.

Leaf rust,

Coffea arabica, disease control, *Hemilea vastatrix* 4076.

disease control, *Triticum aestivum*, fungicides 2273.

disease resistance, genetic variance, *Triticum aestivum* 1161.

disease resistance, *Sorghum vulgare* 1366.

Gramineae, *Puccinia*, disease resistance histology 2264.

Hemilea vastatrix, *Coffea*, pathogenicity 6784.

Hemilea vastatrix, disease control, fungicides, *Coffea arabica* 1341.

Hemilea vastatrix, disease resistance, *Coffea canephora*, light intensity effects

on 3962.

Hemilea vastatrix, disease resistance, detection, methodology, *Coffea canephora*

2261.

Hemilea vastatrix, disease resistance, leaves age effects on, *Coffea arabica*

4976.

Hemilea vastatrix, epidemiology, *Coffea arabica*, Latin America 1216.

Hordeum, disease resistance genes, histology 2265.

Kuehneola uredinis, *Rubus*, weed control, biological control, USA, Hawaii 9410.

Melampsora medusae, photoperiod, effects on, pathogenesis, *populus* 6930.

Melampsora medusae, *Populus deltoides*, *Populus euramericana*, temperature, role,

disease resistance 6911.

pathogenesis, *Puccinia melanocephala*, *Saccharum officinale* 5716.

Puccinia hordei, disease resistance, association colonies abortion, *Hordeum*

vulgare 4057.

Puccinia hordei, virulence, *Hordeum vulgare* 2121.

Puccinia recondita, infectivity, epidemiology, *Triticum aestivum* 370.

Puccinia recondita f.sp. *tritici*, disease resistance, plant breeding, cultivars,

Triticum aestivum 1338.

Puccinia recondita f.sp. *tritici*, *Septoria nodorum*, disease control, triazbutyl,

Triticum aestivum 506.

Puccinia recondita f.sp. *tritici*, temperature effects on infectivity, *Triticum*

aestivum 3932.

Triticum aestivum disease resistance, genetic control, computer applications,

Triticum, North Dakota 7730.

Leaf scorch,

gram-negative bacteria, pathogenicity, *Platanus occidentalis* 9515.

Leaf stripe,

Areca catechu, epidemiology, *Xanthomonas campestris* pv. *arecae* 8568.

Drechslera graminea, temperature effects on disease spread, *Hordeum vulgare* 1425.

Pyrenopeziza graminea, seed treatments, *Hordeum vulgare* 1405.

Leaf surface,

fungi flora, *Brassica campestris*, fungicides effects on 3146.

Leaf-roll,

closterovirus, *Vitis vinifera* 3073.

Solanum tuberosum, etiology, beet western yellows virus 5796.

Vitis vinifera, pathogenesis, ultrastructure, virus-like particles 5782.

viruses, *Vitis vinifera*, cytopathology, histopathology 429.

Leafspot,

Acremonium crotonigenum, disease control, anilazine, *Syngonium podophyllum*

1423.

Ailanthus excelsa, *Phoma medicaginis* var. *pinodella*, India 2221.

Alternaria brassicicola, incidence, pathogenicity, *Brassica oleracea*

var. *capitata*, Brazil 6818.

Alternaria, *Cajanus cajan*, India 3926.

Alternaria, pathology, *Schefflera arboricola*, *Brassica actinophylla* 3993.

Andropogon gerardi, *Andropogon scoparius*, *Sorghastrum nutans* 1174.

Aschochyta avenae, pathogenicity, climatic conditions, *Avena sativa*, *Triticum*

aestivum, *Hordeum vulgare* 8549.

Bipolaris oryzae, *Pycularia oryzae*, lesions, hypersensitive response, *Oryza*

sativa 5039.

Brassica oleracea seeds, disease control, iprodione 508.

Capsicum annuum, *Xanthomonas campestris* pv. *vesicatoria*, disease resistance 7742.

Cercospora arachidicola, *Cercosporidium personatum*, chlorothaloni, disease

control, *Arachis hypogaea* 1409.

Cercospora arachidicola, disease resistance, *Arachis hypogaea*, genetic analysis

452.

Cercospora arachidicola, effects on nodulation, growth, seedlings, *Arachis*

hypogaea 341.

Cercospora arachidicola, interspecific relationships, *Phoma arachidicola* blotch,

yield, *Arachis hypogaea* 2998.

Cercospora, *Arachis hypogaea*, bavinin effects on 4119.

Cercospora zae-maydis, pathology, *Zea mays* 9337.

Cercospora zae-maydis, relative humidity, dew, effects on, pathogenesis, *zea*

mays 2135.

Cercosporidium personatum, disease resistance, cultivars screening, *Arachis*

hypogaea 9475.

Chrysosporium lutescens, fungi etiology 1269.

Colletotrichum gloeosporioides, *Fraxia* 9425.

Corynebacterium flaccumfaciens, *Glycine* max 9323.

Corynespora caciola, *Aeschynanthus pulcher* 2192.

Cristulariella moricola, pathology, *Ziziphus mauritania* 8596.

Cucumis sativus 1305.

Dactylis glomerata, pathogenesis, visual perception, man, *Stagonospora arenaria*

3101.

Leafspot, (continued)

- Differenbachia maculata*, *Fusarium solani* 1268.
 disease control, *Dioscorea dumetorum*, fungicides use 5061.
Drechslera setariae, *Arachis hypogaea* 9485
 disease resistance screening, *Cercospora arachidicola* sporulation, *Arachis hypogaea* 5047.
 disease resistance, *Sorghum vulgare* 1366.
Drechslera, *Lolium*, pathology 6768.
Drechslera setariae, *Calathea*, *Maranta* 9426.
Drechslera sorghicola, *Sorghum*, etiology, pathology 9354.
Drechslera sorokiniana pathogenesis, *Poa pratensis* sugars, amino acids, herbicides effects on 5718.
Drechslera sorokiniana, *Poa pratensis* leaves senescence, herbicides effects on pathogenesis 936.
Drechslera teres, *Hordeum vulgare* 1173.
Entomosporeum mespili, *Raphiolepis indica*, *Raphiolepis delacouri* 5775.
Eucalyptus, New Zealand, fungi 7706.
Eucalyptus, *Septoria pulcherrima* sp.nov., *Trimmastroma bifarium* sp.nov., characterization 5085.
Ficus erecta, *Pseudomonas ficuserectae* sp.nov. 7715.
 fungi, *Cymbopogon martini* 3985.
 Glycine max, *Aristarostoma camargraphioides* 2997.
 Helianthus annuus, *Alternaria helianthi* infection 1255.
 Helminthosporium sativum, disease resistance, heredity, *Triticum aestivum* 3121.
 Heterosporium indis, Ins germanica, incidence, *USA*, Arkansas 4988.
 Helminthosporium, symptoms, *Septoria nodorum* isolation, characterization, infectivity 6751.
 Medicago sativa, disease resistance, screening 6860.
 Medicago sativa, surveys, Egypt 5670.
 medicinal plants, phytopathogenic fungi 7686.
Mycosphaerella muscicola, *Tridactylon* disease control, *Musa* 4127.
Tridactylon rordum, ornamental plants 5747.
 ornamental plants, irrigation effects on pathogenesis 1274.
 pathogenesis, *Zeas mayis*, sporulation, *Cercospora zeae-maydis* 3957.
Pestalotia palmarum, *Helminthosporium*, disease control, fungicides, *Cocos nucifera* 1391.
Piper nigrum, *Xanthomonas campestris*, relative humidity effects on pathogenicity 410.
Pseudomonas andropogonis, pathology, *Trifolium repens* 9320.
Pseudomonas cichorii, pathogenicity, *Pelargonium* 5795.
Pseudomonas syringae pv. *lachrymans*, *Cucumis sativus*, disease control, seed treatments 9511.
Pseudomonas syringae, *Protea cynaroides* 6804.
Pseudomonas syringae pv. *tagetes*, *Ambrosia artemisiifolia* 5003.
Pseudomonas syringae pv. *tagetes*, seed-borne diseases, *Helianthus annuus* 1303.
Pseudopeziza medicaginis, *Medicago sativa*, *USA*, Wyoming 9330.
Pyrenopeziza brassicae, fungicides, disease control, *Brassica oleracea* 2276.
Pyrenophora bromi, screening, disease resistance, *Bromus inermis* 9458.
Cypripedium periseticum, *Penicillium typhoides*, air spora, analysis 4000.
 Septoria helianthi, *Helianthus annuus*, new records, Pakistan 7697.
 Septoria helianthi, incidence, identification, *Helianthus annuus*, Turkey 9438.
 Septoria lycopersici, disease control, plant breeding, *Lycopersicon esculentum* 5048.
 Septoria molieriana, *Canavalia kauensis* 4990.
 Septoria venicola, pathogenicity, *Helianthus annuus* 7557.
 Simmondsia californica, pathogenesis, *Pleospora herbarum*, new records 8578.
 Staphylinium botrysom, pathogenesis, light, relative humidity effects on, *Medicago sativa* 1141.
 viruses, *Agave sisalana* 7698.
Xanthomonas bellicola, *Piper bette*, disease resistance 4023.
Xanthomonas campestris, susceptibility, magnesium levels, leaves, *Capsicum* 5841.
Xanthomonas phaseoli, bleaching powder, antibacterial activity, *Vigna radiata* 2289.
Xanthomonas phaseoli, disease control, fungicides, antibiotics, *Vigna radiata* 509.
- Leandria momordica**,
 spot, pathology, *Cucumis sativus* 5768.
- Leaves,**
 Acer platanoides, Acer pseudoplatanus, viruses infection 2309.
 age, *Solanum tuberosum*, disease transmission, potato leaf roll virus, *Myzus persicae* 2182.
 Allium cepa, age, relationship, *Alternaria porri* infection sensitivity 4009.
Arachis hypogaea, volatiles, effects on *Sclerotinia minor* sclerotia germination, blight 4937.
 Avena sativa, defense mechanisms, *Pyrenophora teres* infection 1356.
 Beta vulgaris, extracts, detection, beet yellows virus, beet mild yellowing virus, enzyme-linked immunosorbent assay 3527.
 Capsicum, magnesium levels, leafspot susceptibility, *Xanthomonas campestris* 5841.
 cells, hop stunt disease virus infection, plants, localization 313.
 Coffea arabica, age effects on disease resistance, leaf rust, *Hemileia vastatrix* 4976.
 Crassulaceae, *Colletotrichum gloeosporioides* rust, detection methodology 9447.
 crops, contamination, poliovirus, adenovirus, recovery methodology 1767.
 Crotalaria juncea, morphactin treatment, microorganisms ecology 7757.
Cucumis sativus, carbohydrates metabolism, *Sphaerotheca fuliginea* infection, effects on 1273.
Cucumis sativus, *Vigna sinensis*, protein composition, disease resistance, tobacco necrosis virus 9460.
 culture, *Populus*, *Melampsora larici-populina* group, benzimidazole effects on 6880.
 decomposition, soil microorganisms, *Eperua falcata*, forests 1439.
 extracts, antimicrobial activity, *Polystachya longifolia* 6084.
 fungi, infected, *Avena sativa*, spectrophotometry, localization, *avenalumin* 3912.
 Glycine max, agglutinins, disease resistance, *Pseudomonas glycinea* 3128.
 Glycine max, peroxidase activity, downy mildew, *Peronospora manshurica* 346.
 Glycine max, *Phakopsora pachyrhizi* rust, microscopy analysis 8543.
 Gomphrena glabra, disease resistance, tomato bushy stunt virus 1379.
 Gossypium hirsutum, ultrastructure, *Xanthomonas campestris* infection 417.
 Gossypium hirsutum, ultrastructure, *Xanthomonas campestris* infection 418.
 heat balance, energetics, tobacco mosaic virus infection, *Nicotiana tabacum* 1288.
 histology, ultrastructure, *Melampsora lini*, rust, *Linum usitatissimum* 9401.
 Hordeum, developmental stages, association disease resistance, *Erysiphe graminis* f.sp. *hordei* infection 483.
 hypersensitive response, viruses infection, *Gomphrena globosa* 2156.
 Hypsis suaveolens, oils, antifungal activity, *Helminthosporium oryzae* 494.
 lesions, plant diseases, measuring techniques, computer applications, video image

Leaves, (continued)

- analysis 4924.
 lesions, *Sylotianthes guianensis*, *Curvularia eragrostidis* 3991.
Lycopersicon esculentum, extracts, antifungal activity 695.
Lycopersicon esculentum, infected, potato spindle tuber viroid double-stranded RNA 3044.
 Manhot escluenta, cassava common mosaic virus infection, yield 407.
 Marssonina juglandis penetration, anthracnose, *Juglans nigra* 3029.
Medicago rugosa, *Helminthosporium carbonum* infected, phytoalexins, isolation, characterization 1355.
 Medicago sativa, phytoalexins, interaction, *Verticillium albo-atrum* 2999.
 mesophyll, *Citrus sinensis*, *Citrus limonia*, disease resistance, *Xanthomonas campestris* 456.
 necrosis, *Trifolium*, yield reduction, *Septoria tritici* infection 9368.
Nicotiana tabacum, post-harvest decay, *Botryosporium longibrachiatum* 9454.
Nicotiana tabacum, protoplasts, tobacco mosaic virus infection 3041.
Nicotiana tabacum, *Pseudomonas* pisi infection, hypersensitive response association mesophyll 462.
Nicotiana tabacum, *Pseudomonas syringae* pv. *tabaci*, lipopolysaccharides, association, encapsulation 3064.
Nicotiana tabacum, tobacco mosaic virus infection, ultrastructure localization 4033.
 Olea europaea, *Pseudomonas syringae* pv. *savastoni*, virulence 5742.
 Oryza sativa, proline induction, rice tungro virus infection 1157.
 Oryza sativa, *Xanthomonas oryzae*, phytoalexins, purification, effects on 7640.
 Passalora infection, *Zizyphus rotundifolia* 7790.
 Persea americana, avocado sunblotch disease viroid infected, RNA detection 3028.
 persistence, *Bacillus thuringiensis* spores, biological control, *Lepidoptera* 1006.
 Pinus nigra, *Pinus sylvestris*, *Cronartium flaccidum* association, basidiospores spore germination 4154.
 Pinus sylvestris, fungi infection, relationship, age 4177.
 Pisum sativum, defense mechanisms, endopolygalacturonase inhibitor induction, *Ascochyta* pisi infection 1350.
 Pisum sativum, pea enation mosaic virus infection, pathogenesis 9390.
 Poa pratensis, senescence, *Drechslera sorokiniana* leafspot, herbicides effects on pathogenesis 5387.
 potato virus M levels, *Solanum tuberosum* 7693.
 proteins, *Phaseolus vulgaris*, hypersensitive response, infection, *Colletotrichum indennitium*, alfalfa mosaic virus, peanut stunt virus 1333.
 Rhododendron obtusum, bioassays, *Phytophthora cinnamomi*, soil 324.
 Ribes nigrum, sakuranetin, antifungal activity, *Botrytis cinerea* 1332.
 rnonbuclease, role inhibition tobacco mosaic virus, potato virus X, multiplication, plants 2095.
Solanum tuberosum, *Beauveria bassiana* conidia foliar application, pathogenicity 1.
 Leptinotarsa decemlineata, bioassays, biological control 7482.
Solanum tuberosum, susceptibility, *Phytophthora infestans* infection 1228.
Solanum tuberosum, *Verticillium albo-atrum* infection, pathology, hypersensitive response 3086.
Sorghum bicolor, use, *Peronosclerospora sorghi* types differentiation 3936.
 Thallusia testudinum, fungal flora, sterilization methodology 3623.
 tobacco, post-harvest decay, thermophilic fungi, association storage 8599.
 Triticum aestivum, defense mechanisms, lignin induction, *Botrytis cinerea* infection 1368.
 Triticum aestivum, *Puccinia recondita* uredinia growth rate association 6748.
 ultrastructure, hypersensitive response, *Pseudomonas* pisi, *Nicotiana tabacum* 6790.
 Vitis vinifera, grapevine fanleaf virus mixed infection 5784.
 Zea mays, application, *Colletotrichum graminicola*, *Helminthosporium maydis*, spores, methodology, humidity 9081.
- Legtina,**
 affinity chromatography, isolation, infectious anemia virus envelopes glycoproteins 8097.
 characterization, *Pseudomonas aeruginosa* 6378.
 purification, physicochemical properties, *Aleura aurantia* 6377.
 Streptomyces, purification, physicochemical properties 1967.
 Trifolium repens, roots exudates, binding capsules *Rhizobium trifolii* 1508.
 Vicia faba, *Rhizobium leguminosarum* interaction, 2,4-D, 2,4,5-T, effects on agglutination 8692.
- Legionella,**
 amino acids, proteinase activity analysis methodology 7239.
 carbohydrates antigens, enzyme-linked immunosorbent assay 6307.
 incidence, drinking water 2624.
- Legionella bozemanii,**
 carbohydrates antigens, enzyme-linked immunosorbent assay 6307.
- Legionella longebachae,**
 water isolates, hospitals, Europe 6263.
- Legionella micdadei,**
 carbohydrates antigens, enzyme-linked immunosorbent assay 6307.
- Legionella oakridgensis** sp.nov.,
 cooling water isolates, characterization 3475.
- Legionella pneumophila,**
 antibiotic sensitivity testing 9738.
 antibodies, detection, enzyme-linked immunosorbent assay 9902.
 bis(triubutyl)oxide, bactericidal activity, bacterostats 3332.
 blood culture, isolation methodology 9912.
 blood culture, sodium chloride, phosphate buffers 851.
 carbohydrates antigens, enzyme-linked immunosorbent assay 6307.
 colonization, relationship hot water temperature, hospitals 8972.
 contamination, cooling water, detection methodology 3474.
 cooling towers, bioicides, antimicrobial activity 5221.
 eradication, ozone use, hospitals 4460.
 growth inhibition, α -amylase 7247.
 hypersensitivity (delayed), guinea-pigs, immunoassays, immunity (cell-mediated) detection 9937.
 identification, latex agglutination 9911.
 incidence, cooling water, antimicrobial agents effects on, British Isles 1706.
 isolation, pH effects on media (culture) 9953.
 Legionellosis, water-borne diseases, man, drinking water 2633.
 legionnaire's disease, diagnosis, indirect fluorescent antibody test, man 867.
 Legionnaire's disease, man, detection, cell agglutination methodology 3588.
 proteins characterization, electrophoresis 9128.
 staining, tissues 5377.
 survival, decontamination, paraformaldehyde, laboratories 2459.
 susceptibility, myeloperoxidase, xanthine oxidase, association, oxygen 2429.
 water isolates, hospitals, Europe 6263.
 water supplies contamination, hospitals 1719.

- Legionellaceae**, proteins characterization, electrophoresis 9128.
- Legionellosis**, water-borne diseases, man, drinking water 2633.
- Legionnaire's disease**, diagnosis, indirect fluorescent antibody test, man 867.
- man**, detection, *Legionella pneumophila* cell agglutination methodology 3588.
- Legislation**, Dimulus lysate test, endotoxins, toxicity testing 6712.
- Leguminosae**, Australia, *Rhizobium* isolation, characterization 6990.
- cross-infectivity**, *Rhizobium* 5965.
- field trials**, *Rhizobium* inoculum analysis 5132.
- interspecific relationships**, mutualism, mycorrhizas, *Rhizobium* 9555.
- nitrogen fixation**, acidity, soil chemistry, agricultural land 5956.
- nitrogen fixation analysis**, isotopes methodology 5131.
- nitrogen fixation**, association, glutamate synthase, role, ammonia assimilation 5939.
- nitrogen fixation**, books 8177.
- nitrogen fixation**, carbon flux association 5938.
- nitrogen fixation**, Israel 5946.
- nitrogen fixation**, nitrogen fertilizers effects on 5105.
- nitrogen fixation**, role *Rhizobium* 600.
- nodulation**, nitrogen-fixing bacteria, conferences 7004.
- nodulation**, *Rhizobium* phaseoli, strains competition 4245.
- nodules**, *Rhizobium*, hydrogenase activity 7837.
- plant diseases**, surveys 7659.
- plant viruses**, identification, USA, Tennessee 5689.
- powdery mildew**, epidemiology, *Erysiphe cichoracearum* 8536.
- Rhizobium* infection**, effects on *Grammea* 2113.
- Rhizobium japonicum* nitrogen fixation**, hydrogen production, recycling 5936.
- Rhizobium japonicum* survival**, association, sewage sludge soil amendment 7832.
- Rhizobium* nodulation**, nitrogen fixation, herbicides application effects on 8688.
- rhizosphere**, phosphate-dissolving bacteria 2333.
- root hairs**, nodulation, role indole-3-acetic acid, *Rhizobium* 1509.
- roots** ethylene biosynthesis, *Rhizobium* nodulation, sulfur fertilizers effects on 1503.
- rust**, fungi, bioassays, detection, chitin 6737.
- seeds**, inoculation, *Rhizobium japonicum*, *Rhizobium phaseoli*, survival, liquid culture 1786.
- seeds**, *Rhizobium* inoculation, problems, Israel 5945.
- seeds**, + *Rhizobium*, survival, inoculum methodology effects on 1510.
- solar radiation effects** on, *Rhizobium* nitrogen fixation, growth 5115.
- nitrogen fixation**, soil microorganisms comparison 601.
- agricultural practices**, research programs, symbiosis, *Rhizobium*, Latin America 3227.
- host range**, *Colletotrichum trifolii* 1139.
- Lemonniera aquatica***, biodegradation, *Populus tremuloides*, leaf litter 8045.
- Lemonniera terrestris***, biodegradation, *Populus tremuloides*, leaf litter 8045.
- Lemons**, post-harvest decay, sour rot, disease control, CGA-64251 1322.
- plant diseases**, surveys 7659.
- symbiosis**, *Rhizobium*, salinity tolerance effects on 5955.
- Lens esculenta***, nodulation, *Rhizobium leguminosarum* competitiveness 3235.
- asymptomatic infection**, *Fusarium oxysporum* f.sp. *clivieri* 4938.
- Leontideis edodes***, antitumor agents, carbohydrate composition 1963.
- γ -glutamylinoctanin**, γ -glutamylglutamic acid, purification 914.
- Leontideis lepideus***, sesquiterpenes 4259.
- Leontideis pallidifolia***, post-harvest decay, *Hevea brasiliensis* cellulose, lignins, Malaysia 7791.
- Leontideis nepetifolia***, host plants, Phomopsis, new records, Brazil 6826.
- Leontideis sibiricus***, host plants, Phomopsis, new records, Brazil 6826.
- sour cherry** necrotic ring spot virus infection 2144.
- Lepidoptera**, biological control, *Bacillus thuringiensis* spores, persistence, leaves 1006.
- biological control**, pathogens, *Nomuraea rileyi* 1010.
- Leprosy**, diagnosis, enzyme-linked immunosorbent assay, use, *Mycobacterium smegmatis* arabinomannan, man 6328.
- epidemiology**, radioimmunoassay, man 848.
- Mycobacterium leprae***, immunoassays, epidemiology, man 846.
- subclinical infection** detection, fluorescent antibody test, man 847.
- Leptotarsa decemlineata***, pathogenicity, *Beauveria bassiana* conidia foliar application, *Solanum tuberosum* leaves, bioassays, biological control 7482.
- Leptographium**, black stain, pathogenicity, *Pinus ponderosa* 5082.
- Leptographium terebrantis***, black stain, pathogenicity, *Pinus ponderosa* 5082.
- Leptomycin A**, Streptomyces biosynthesis, physicochemical properties, antifungal activity, *Schizosaccharomyces pombe*, *Mucor* 8028.
- Streptomyces**, structure 8029.
- Leptomycin B**, Streptomyces biosynthesis, physicochemical properties, antifungal activity, *Schizosaccharomyces pombe*, *Mucor* 8028.
- Streptomyces**, structure 8029.
- Leptomycin D**, lysis, phagocytosis, *Gaumannomyces graminis* var. *tritici*, *Phytophthora cinnamomi*, *Cochliobolus sativus*, soil 563.
- Leptoperium**, mycorrhizas, New Zealand 7774.
- Leptosphaeria maculans***, incidence, Brassica seed crops, British Isles, surveys 4042.
- latent infection**, Brassica napus 4041.
- Leptosphaeria maculans***, (continued) reproduction stages suppression, chemicals treatment, Brassica napus crop residues 463.
- Leptospira**, agglutination micromethods, standardization, antigens concentration association 7260.
- bacterins**, canine distemper virus, adenovirus (canine), parvovirus (canine), cell walls polysaccharides, ultrastructure 8330.
- leptospirosis**, man, animals, diagnosis methodology 2662.
- media** (culture) 5421.
- Leptospira biflexa***, antigens, agglutination, immunodiagnosis, Leptospirosis, man 5380.
- Leptospira canicola***, combined vaccines, antibody response, dogs 3449.
- Leptospira icterohaemorrhagiae***, combined vaccines, antibody response, dogs 3449.
- Leptospira icterohaemorrhagiae***, water pollution, rivers, epidemiology, infection, man 6266.
- Leptospira interrogans***, growth, polyvinylpyrrolidone + Tween media (culture) 9031.
- Leptospira interrogans* ser. hardjo**, drug sensitivity testing 8780.
- enzyme-linked immunosorbent assay**, antibodies, cattle 8118.
- vaccines**, immunogenicity, animal models 3455.
- Leptospira interrogans* ser. pomona**, enzyme-linked immunosorbent assay, antibodies, cattle 8118.
- vaccines**, immunogenicity, animal models 3455.
- Leptospirosis**, immunodiagnosis, agglutination, *Leptospira biflexa* antigens, man 5380.
- man**, animals, diagnosis methodology 2662.
- Leptothrix**, contamination, wells 3483.
- Leptothrix medicaginis***, leaf blight, Medicago sativa, USA, Wyoming 9330.
- Lesions**, assays, use, Phaseolus vulgaris, pathogenicity, infection, bean common mosaic virus, soybean mosaic virus 8542.
- Botrytis fabae** infection, Vicia faba, spatial distribution, statistical analysis methodology 2110.
- development**, Vicia faba, siderophores, Botrytis cinerea 3000.
- kidney**, pigs, contamination, Hordeum vulgare, ochratoxin A, Aspergillus ochraceus 7622.
- leaves**, Curvularia ergostidis, Stylosanthes guianensis 3991.
- lucerne transient streak virus**, RNA, induction, Chenopodium amaranticolor 5779.
- Physalis angulata**, methodology, use, detection, potato virus A mixed infection 2157.
- Septoria glycines** brown spot, Glycine max, relationship seeds color 5684.
- Lespedeza cuneata***, Rhizoctonia blight, disease resistance, plant breeding 6866.
- Rhizoctonia blight**, pathogenicity, seeds yield association 6745.
- Lettuce**, juices, bacteria contamination, public health, man 4792.
- refrigeration**, nitrate-reducing bacteria growth 3836.
- Lettuce big vein virus**, big vein disease, methyl bromide, carbendazim, disease control, Lactuca sativa 6889.
- Lettuce drop**, Sclerotinia minor, disease control, metham sodium, Lactuca sativa 4002.
- Lettuce mosaic virus**, detection, Lactuca sativa seeds, enzyme-linked immunosorbent assay, USA, Florida 5017.
- infection**, Taraxacum 2177.
- radioimmunoassay** test detection, Lactuca sativa seeds 1754.
- Leucaena leucocephala***, nodulation, rhizosphere microorganisms, *Rhizobium* 5959.
- Rhizobium***, inoculation Desmanthus virgatus, tests, dilution frequency 1505.
- Leucine**, conversion, 3-methyl-1-butanol biosynthesis, Saccharomyces cerevisiae, valine effects on, nutrient requirements 3724.
- Leucine dehydrogenase***, Bacillus sphaericus, Bacillus megaterium, use, aminopeptidase assays, serum, man 6308.
- Leucinoatatin B***, stereochemistry, uncouplers, mitochondria 9777.
- Leucogracilis naucina***, basidiol biosynthesis, physicochemical properties 6219.
- Leucomycin**, aglycone, Streptovorticillium kitasatoensis biosynthesis 8904.
- Leuconostoc**, aroma compounds production, mutation stimulation 7474.
- fermentation**, *Pentaclethra macrophylla* seeds 6675.
- fermentation**, Sauerkraut 5608.
- starter cultures** temperature, buttermilk production 4802.
- Leuconostoc cremoris***, fermentation effects on proteins, milk products production 4805.
- Leuconostoc lactis***, inoculum, cheese, production 198.
- Leuconostoc mesenteroides***, lensulfothion biodegradation 7538.
- glucose-6-phosphate dehydrogenase**, kinetics, mathematical models 6489.
- glucose-6-phosphate dehydrogenase**, purification 4617.
- incidence**, ethanol fermentation, wine storage 9243.
- sucrose phosphorylase**, production 4671.
- use**, biological control, Brochothrix thermosphacta food contamination, meat products Lactobacillus 4835.
- Leuconostoc oenos***, cell culture, use, wine, fermentation 4741.
- incidence**, ethanol fermentation, wine storage 9243.
- malolactic fermentation**, solids effects on, wine 3757.
- pH + sulfur dioxide**, effects on, fermentation, wine 3761.
- role**, fermentation, wine, pH 2867.
- wine fermentation**, Saccharomyces cerevisiae interaction 4742.
- Leucostoma cincta***, infection, Prunus persica, disease resistance 3963.

- Leukocytes (mononuclear).**
horses, herpesvirus (equine) infection, detection assays 355.
- Levan,**
production, *Zymomonas mobilis* immobilized cells, association, sucrose fermentation 9192.
- biosynthesis, acetic acid bacteria 1956.
- Levanucrase,**
Zymomonas mobilis, purification, glucose, ethanol, inhibition activity 8270.
- Lavelliella taurica,**
powdery mildew, pathology, *Cucumis sativus* 5776.
- Levomycelin,**
antibiotic resistance, *Pseudomonas aeruginosa* 7023.
effects on, *Bordetella pertussis* ultrastructure 1599
+ ethonim, antibacterial activity, bacteria 1558.
Salmonella clinical isolates, antibiotic sensitivity testing 6112.
Yersinia pestis antibiotic sensitivity testing 6110.
- Levorin,**
Actinomadura antibiotic sensitivity testing 6109.
biosynthesis, actinomycetes, relationship, *Candida tropicalis* culture extracts 6233.
biosynthesis, actinomycetes, role nuclease, proteinase, α -amylase 7123.
biosynthesis, fungi mycelia, relationship p-aminocetophenone concentration 4711.
biosynthesis, *Streptomyces levoris*, aromatic compounds, amino acids effects on 1662.
biosynthesis, *Streptomyces levoris*, yeasts stimulants effects on 8021.
inactivation mechanisms, physicochemical properties 770.
isolation, stabilization, association, storage 2594.
oxidation 8897.
stability time association storage 1654.
Streptomyces levoris, biosynthesis, p-aminobenzoic acid effects on 778.
- Libertia faginea,**
infection, association *Phyllaphis fagi* outbreaks, *Fagus* 3166.
- Lichens,**
L-uronic acid, biosynthesis, antibacterial activity 6.
vanillic acid biosynthesis 3649.
- Life cycle,**
Botryodiplodia theobromae, soft rot, *Dioscorea* 5791.
Deuteromycetes, pathogenicity, biological control, *Culicidae* 1012.
Selana italica, association *Azospirillum brasilense* nitrogen fixation 8702.
- Light**
effect on, tobacco necrosis virus infected *Phaseolus vulgaris* hypocotyls 2992.
effects on *Alternaria alternata* growth, *Helianthus annuus* 6800.
effects on, powdery mildew, *Begonia* 401.
effects on *Stemphylium botryosum*, leafspot, pathogenesis, *Medicago sativa* 1441.
effects on water sampling, indicator species bacteria, enumeration 2625.
marine environment, effects on survival, *Enterobacteriaceae* 3467.
Sorghum vulgare, effects on *Glomus fasciculatus* symbiosis 2331.
wavelength, effects on growth, nitrogen fixation, growth, *Trifolium repens* 9589.
- Light intensity,**
effects on, *Coffea canephora* disease resistance, leaf rust, *Hemileia vastatrix* 3962.
effects on *Rhizobium meliloti*, nitrogen fixation, nodulation, *Medicago sativa* 9586.
role, sterol composition, late blight pathogenesis, *Lycopersicon esculentum* 5785.
sensitivity, *Melampsora medusae* races, infection, *Populus deltoides* 6917.
- Light scattering,**
cytochrome c subunit association, *Rhodospirillum rubrum* 7296.
Haemophilus influenzae polysaccharides cattle serum albumin conjugate, hydrodynamics 978.
 α -ketoglutarate dehydrogenase multienzyme complexes self-association, *Escherichia coli* 8269.
- Light-harvesting proteins,**
Rhodospseudomonas sphaeroides, solubilization, detergents extraction methodology, *Rhodospseudomonas sphaeroides* 9028.
- Lignin,**
biodegradation, dissolved oxygen transfer, *Phanerochaete chrysosporium* 5588.
biodegradation, fungi, *Pinus*, straw 171.
biodegradation, *Hyphomycetes* 3777.
biodegradation, metabolism, *Phanerochaete chrysosporium* 3778.
biodegradation, oxygen role, *Phanerochaete chrysosporium* 3763.
biodegradation, *Phanerochaete chrysosporium* 6644.
biodegradation, *Phanerochaete chrysosporium*, association, dyes decolorization 6646.
biodegradation, *Phanerochaete chrysosporium*, nitrogen sources effects on 2880.
biodegradation, *Phanerochaete chrysosporium*, products association 2902.
biodegradation, *Phanerochaete chrysosporium*, role, hydroxyl radicals 2001.
biodegradation, *Pleurotus ostreatus* 5598.
biodegradation, *Sporotrichum pulverulentum*, *Trichosporon capitatum* 1998.
biodegradation, *Streptomyces violaceus* 2887.
biosynthesis, *Cucumis melo*, *Colletotrichum lagenarium* infection effects on 3097.
biosynthesis, *Nicotiana tabacum*, hypersensitive response, tobacco mosaic virus 4090.
conversion, *Arthrobaacter* 2889.
p-coumaric alcohol, biodegradation characterization, *Aspergillus flavus* 164.
decomposition, soil microorganisms 1476.
formation, *Oryza sativa*, phytopathogenic fungi infection 6763.
formation, rice disease resistance, *Avena sativa* 5053.
induction, *Trifolium aestivum* leaves, defense mechanisms, *Botrytis cinerea* infection 1368.
models, arylglycerol- β -synngarsinal ethers biodegradation mechanisms, *Fusarium solani* 6651.
plants, biodegradation, carbon incorporation, soil 5599.
Populus, fungi, biodegradation 6652.
solubilization, depolymerization, *Phanerochaete chrysosporium* 5589.
biodegradation, *Corioli* versicolor 8422.
biodegradation, microorganisms soil isolates, anaerobic conditions, Egypt, Arab Rep. 8428.
Hevea brasiliensis, post-harvest decay, decay fungi, Malaysia 7791.
- Lignocellulose,**
antibacterial activity 7926.
antibacterial activity, *Escherichia coli*, 6051.
- Lignocellulose,**
biodegradation, comparison, softwoods, *Corioli* versicolor, *Poria placenta* 170.
biodegradation, fungi mixed culture 3772.
- Lignocellulose, (continued)**
biodegradation, microorganisms 3800.
biodegradation, *Phanerochaete chrysosporium*, oxygen role 7550.
biodegradation, *Sporotrichum pulverulentum* comparison *Dichomitus squalens* 1999.
biodegradation, thermophilic fungi 6641.
biodegradation, *Trichoderma*, screening 3795.
degradation, *Agaricus bisporus* cultivation, nutritive value, reviews 7596.
enzymes hydrolysis, cellulolytic microorganisms, reviews 7540.
fermentation, *Trichoderma reesei* cellulase adsorption characterization 7530.
- Lignocellulose,**
biodegradation, *Chaetomium cellulolyticum*, single-cell protein production, nutritive value, toxicity testing, laboratory animals 9116.
biodegradation, *Fusarium* 9261.
cellulolytic microorganisms biodegradation, feeds production 9252.
Trichoderma viride, cellulase, hydrolysates, dinitrosalicylic acid assays, sugars 9073.
- Lignosulfonate,**
metabolism, *Penicillium*, media (enrichment), biodegradation 3797.
- Lignosulfonates,**
Sporotrichum pulverulentum biodegradation, polyacrylic acid effects on 6643.
- Lilium,**
bulbs, disease control, *Fusarium oxysporum*, quintozene+ferbam 1427.
plant viruses infection, growth inhibitors effects on 7703.
- Lilium longiflorum,**
plant diseases 9417.
pollen, aflatoxins bioassays, use 5641.
tulip breaking virus, transmission (mechanical), *Chenopodium* 7707.
- Lilium tigrinum,**
arabid mosaic virus, disease transmission, *Xiphinema diversicaudatum*, fumigation 6871.
- Limes,**
processing, industrial wastes, *Propionibacterium shermanii* use, cyanocobalamin production 8391.
- Limiting factors,**
Phymatolichium omnivorum, geographical distribution, soil characteristics, environmental requirements 9557.
- Limonin,**
bacteria, spoilage, fruit juices, bitterness 7590.
- Limonium sinuatum,**
mycoplasma-like organisms infection 5750.
- Limonate dehydrogenase**
Corynebacterium fascians, limonoids metabolism 8247.
- Limonoids,**
metabolism, *Corynebacterium fascians*, limonate dehydrogenase 8247.
- Limonomyces,**
infection, *Gramineae*, symptoms 3014.
- Limonomyces culigenus comb. nov.,**
taxonomy, infection, *Gramineae*, symptoms 3014.
- Limonomyces roseipellis sp. nov.,**
taxonomy, infection, *Gramineae*, symptoms 3014.
- Limulus lysate test,**
assays, *Neisseria meningitidis* endotoxins 289.
bacteria endotoxins detection, milk 8478.
detection, bacteria, milk, ultrahigh temperature, pasteurization, 201.
diagnosis, gonorrhea, man 1776.
magnesium, enhancement, sensitivity, detection, endotoxins 5379.
reaction, endotoxins, immunoelectrophoresis detection 9308.
seafood, endotoxins levels 2956.
toxicity testing, endotoxins, legislation 6712.
urea effects on endotoxins assays 8513.
use detection food quality, milk, gram-negative bacteria food contamination 8484.
- Linalyl acetate,**
Pseudomonas incognita, biodegradation 2901.
- Linarase,**
Aspergillus sydowii, *Penicillium stecklii*, detoxification, cassava fermentation 4778.
- Linarin synthase,**
activity, cassava fermentation, *Corynebacterium manihoti* 3847.
- Lincimycin,**
antibiotic resistance, *Streptococcus*, mastitis isolates 2398.
fermentation, monitoring, liquid chromatography 9765.
media (selective), *Ureaplasma*, *Mycoplasma*, *Acholeplasma* 7233.
Mycobacterium antibiotic sensitivity testing 7995.
Yersinia pestis antibiotic sensitivity testing 6110.
- Lincimycin,**
antibacterial activity, anaerobic bacteria 5174.
antibiotic resistance, *Enterobacteriaceae*, animal isolates 660.
- Incosemides,**
Escherichia coli antibiotic resistance, plasmid pKH80 relationship 631.
- Indane,**
antibacterial activity, nitrogen-fixing bacteria, *Eichloria crassipes* isolates 8770.
- Linum catharticum,**
mycorrhizas, nutrient status, seasonal variations 1490.
- Linum usitatissimum,**
leaves, histology, ultrastructure, rust, *Melampsora lini* 9401.
Sclerotinia sclerotiorum, Canada 7691.
seeds, calories content, *Aspergillus niger*, *Fusarium oxysporum* effects on 7722.
- Lipase,**
inactivation, psychrotrophic bacteria, pasteurization, milk 263.
Mucor, 1-acetoxyl-2,3-dichloropropane, asymmetry hydrolysis 158.
production, factors affecting, *Syncephalastrum racemosum* 6558.
production, *Penicillium roqueforti*, factors affecting 7338.
psychrotrophic bacteria, contamination, butter, off flavor 209.
- Lipid A,**
acinetobacter calcoceticus, isolation, characterization 1779.
Rhodospseudomonas sphaeroides, characterization 8332.
- Lipid blayers,**
Escherichia coli, β -lactam antibiotics permeability 6087.
- Lipid composition,**
Allium cepa, white rot, *Sclerotium cepivorum* 5760.
lipopolysaccharides, bacteroids, *Rhizobium lupini* 9188.
lipopolysaccharides, *Pseudomonas* 9597.
Sclerotium cepivorum, white rot, *Allium cepa* 5756.
- Lipid membranes,**
influenza, drug resistance, remantidine interaction 3266.

- Lipid metabolism,**
bacteria, fungi, enzymes, books 9090.
Candida albicans, brefeldin A, antifungal activity 1564.
enzymes, books 9090.
- Lipids,**
assays, *Lipomyces starkeyi* 1971.
biosynthesis, energetics, yeasts 7487.
biosynthesis, *Rhodotorula gracilis*, carbon sources, nitrogen sources effects on 7454.
biosynthesis, yeasts growth, ethanol media 7468.
cytoplasmic membranes, *Chlorobium limicola* f.sp. thiosulfatophilum, characterization 6589.
Halobacterium halobium, use food additives, feeding trials, mice 245.
Kluyveromyces fragilis, effects on ethanol production 2866.
production, *Aspergillus oryzae*, starch, nutrient sources 2855.
production, *Lipomyces starkeyi* batch culture, computer applications 7496.
- Lipoglycoproteins,**
Phytophthora infestans mycelia, effects on *Solanum tuberosum* tubers ultrastructure 2257.
- Lipolysis,**
temperature, effects on, activity, *Thamnidium elegans*, *Mucor mucedo*, *Chaetostylum fresenii* 5512.
- Lipomyces kononenkoae,**
isomylase biosynthesis 1853.
- Lipomyces starkeyi,**
batch culture, computer applications, lipids production 7496.
lipids assays 1971.
- Lipopolysaccharides,**
Acinetobacter calcoaceticus, isolation, characterization 1779.
Aeromonas hydrophila, carbohydrate composition, structure 6577.
antibiotic determinants, *Salmonella*, binding, serum, bactericidal activity, mice 2452.
bacteria endotoxins, assays, cerebrospinal fluid 8525.
bacteria, radiation detoxification 6728.
Brucella abortus, antibodies purification 9914.
cell walls, bacteria, reaction, polymyxin B, identification, methodology 1790.
3-deoxy-D-mannooctulosonic acid composition, *Salmonella minnesota* 5536.
2,3-diacylamido-2,3-deoxy-D-mannuronic acid, *Pseudomonas aeruginosa* 3713.
Escherichia coli, radioimmunoassay, solid phase methods 9296.
Gram-negative bacteria, pyrolysis, gas chromatography, association, differentiation 4490.
lipid composition, carbohydrate composition, bacteroids, *Rhizobium lupini* 9188.
Fasella magna, ultrastructure 2819.
proteins complex, characterization, *Verticillium dahliae*, wilt, *Solanum tuberosum* 1246.
Pseudomonas aeruginosa, detection, enzyme-linked immunosorbent assay 9915.
Pseudomonas, carbohydrate composition, lipid composition 9597.
Pseudomonas syringae pv. tabaci, association, encapsulation, *Nicotiana tabacum*, leaves 3064.
Rhodospseudomonas sphaeroides, characterization 8332.
Salmonella, electrophoresis 9045.
Salmonella minnesota, isolation, 3-deoxy-D-mannooctulosonic acid 6567.
Salmonella typhimurium, *Pseudomonas aeruginosa*, isolation methodology 8148.
Veillonella parvula, biosynthesis, association, incorporation, fructose, ribose 8333.
Vibrio anguillarum vaccines, characterization 8051.
Vibrio cholerae production, media (culture) 3891.
Yersinia pseudotuberculosis, polysaccharides side chains structure 6568.
- Liposomes,**
 β -interferon incorporation, antiviral activity 1579.
- Lipoteichoic acid,**
gram-positive bacteria, isolation methodology 9035.
- Lipoxigenase,**
biosynthesis, *Pseudomonas*, hyaluronic acid effects on 7412.
- Liquid chromatography,**
lincomycin, monitoring, fermentation 9765.
- Liquid culture,**
Abidia corymbifera, mycelia morphology, mixing, rheology 9069.
Aspergillus oryzae var. *irvanicus*, growth conditions 4522.
Beauveria bassiana, *Metarhizium anisopliae*, growth, nutrient sources, carbohydrates 4535.
comparison, agar, media (culture), *Pseudomonas aeruginosa*, *Escherichia coli* 9057.
fermenters, production, *Aspergillus niger* spores 1809.
Lagenidium giganteum, zoospores production 1816.
media (culture), water activity 3515.
Melanconia flavovirens, antibiotics production, inoculum levels 8022.
Mycobacterium tuberculosis 9018.
Penicillium chrysogenum, rheology 9070.
Rhizobium japonicum, *Rhizobium phaseoli*, survival, use inoculation, seeds, Leguminosae 1786.
Rhizopus chinensis, pepsin biosynthesis 100.
Rhizopus chinensis, pepsin biosynthesis 100.
Staphylococcus aureus, media (selective) 1801.
Streptomyces gneusei, sporulation, induction, methodology 9042.
Vibrio fluvialis media (enrichment) methodology, enumeration 8136.
- Liquidambar styraciflua,**
Glomus pathogenicity association, fertilizers induction 6971.
seedlings, vesicular-arbuscular mycorrhizas, phosphate uptake 9503.
- Liquids,**
egg production, *Salmonella*, *Staphylococcus aureus*, food contamination 203.
- Liriiodendron tulipifera,**
seedlings, vesicular-arbuscular mycorrhizas, phosphate uptake 9503.
wood storage, disease control, sap stain, 3-iodo-2-propynyl butyl carbamate, sodium pentachlorophenate, copper-8-quinolinolate 9529.
- Lirula,**
decomposition, leaf litter, *Abies alba* 2301.
- Listeria,**
antibacterial activity, midecamycin, new records 8893.
antibacterial activity, rifamycin derivatives 8858.
antibacterial activity,
6- α -hydroxyethyl-2-acetoxymethyl-2-penem-3-carboxylate 1611.
cefodizime, antibacterial activity 7142.
lysyzymes, Ixodidae, eggs, antibacterial activity 1552.
- Listeria monocytogenes,**
antibacterial activity, ciprofloxacin 9661.
antibacterial activity, ceftriaxone, disc-diffusion test 7998.
- Listeria monocytogenes, (continued)**
 β -lactamase, antibiotic tolerance, β -lactam antibiotics 637.
penicillins, antibiotic antagonism, chloramphenicol, rifampicin 5247.
teichoic acid, structure, immunological aspects 8327.
- Lithium,**
aspartate kinase activation, *Escherichia coli* 6536.
- Lithocholic acid,**
metabolism, *Fusarium equiseti*, ursodeoxycholic acid biosynthesis 1825.
- Lithraea caustica,**
leaf litter, decomposition, soil microorganisms, nitrogen cycle 2362.
- Litter,**
bacteria biomass, agricultural practices, meadows 9534.
branches, size distribution, decomposition, fungi, forest floor 8647.
decomposition, forests, role, local microflora, *Clethrionomys* 1449.
forest floor, biodegradation, *Collybia maculata*, *Collybia butyracea*, *Collybia distorta*, *Abies alba* 1442.
- Litter fall,**
decomposition, nutrient dynamics forests, floodplains, USA, Illinois 6890.
- Liver,**
abscesses, cattle, *Fusobacterium necrophorum* isolates, antibiotic sensitivity testing 7121.
beef, bacteria growth, packaging, cold storage 267.
localization, hepatitis B surface antigen, staining, methodology, man 827.
rats, carcinogenesis, aflatoxin B1, proteins nutrition effect on 4902.
chickens, food contamination, *Campylobacter fetus* subsp. jejuni 9277.
- Livestock,**
drinking water contamination, coliforms, fecal coliforms 8975.
feeds additives, antibacterial agents, residues analysis 252.
Phthomyces chartarum eczema, association, fungicides application methodology 4529.
- Lobularia maritima,**
vesicular-arbuscular mycorrhizas, *Lunaria annua*, vesicular-arbuscular mycorrhizas 6969.
- Locl,**
Mi-a locus, association, *Hordeum vulgare*, disease resistance, *Erysiphe graminis* f.sp. hordei infection 8611.
toxi locus, phytoalexins biosynthesis, gene regulation, *Cochliobolus heterosporus* 2953.
- Locusta migratoria,**
role, *Colletotrichum graminicola* anthracnose, *Zea mays* 369.
- Loderomyces elongisporus,**
continuous culture, hydrocarbons utilization, factors affecting 4264.
growth conditions, effects on, synchronous culture, oil 4266.
- Lolium,**
leaf blotch, *Rhynchosporium*, crown rust, *Puccinia coronata*, leafspot, *Drachyslera*, pathology 6768.
Pynclanula grisea infection, disease resistance 1363.
staggers, fungi, propiconazole, antifungal activity 2481.
Lolium multiflorum,
detection, ryegrass mosaic virus, ryegrass seed-borne virus 6758.
disease resistance, crown rust, *Puccinia coronata* f.sp. lolii 4079.
fungi infection, incidence, British Isles 5721.
- blast, Pycularia grisea**, pathogenicity 1178.
- Lolium perenne,**
Crambus resistance, association endophytes, fungi 4954.
detection, ryegrass mosaic virus, ryegrass seed-borne virus 6758.
disease resistance, crown rust, *Puccinia coronata* f.sp. lolii 4079.
effects on soil, respiration, enzyme activity 5103.
fungi infection, incidence, British Isles 5721.
Fusarium culmorum infection, role, *Fusarium culmorum* infected roots, crop residues 3961.
infection, fungi, incidence, disease control 377.
neurotoxins, phytoalexins, response fungi infection 3955.
pathogenicity, *Rhizoctonia zeae* 5701.
silage, *Trichoderma viride*, cellulase, role 2931.
soil fertility, relationship *Laetisaria fuciformis* infection 9357.
vesicular-arbuscular mycorrhizas, *Gigaspora margarita*, carbon sources competition 564.
wheat dwarf virus infection 2120.
yield, captan seed treatment 5847.
- Lolium rigidum,**
growth, *Glomus fasciculatum*, phosphate fertilizers 9547.
- Lolium temulentum,**
wheat dwarf virus infection 2120.
- Long-term effects,**
fluoride treatment, dental hygiene, children, dental caries 3499.
- Loose smut,**
Hordeum vulgare, seed treatments, fungicides, reviews 4132.
Triticum, races, *Ustilago tritici*, Australia 3941.
Ustilago, disease control, seed treatments, *Triticum aestivum* 1431.
Ustilago, disease resistance, genetic analysis, *Triticum aestivum* 7744.
Ustilago nuda, virulence genes, inheritance, *Hordeum* 4967.
Ustilago tritici, disease resistance, *Triticum aestivum* 8624.
- Lophodermella arcuata,**
infection, *Pinus lambertiana*, disease spread, effects on growth 1461.
- Lophodermium,**
decomposition, leaf litter, *Abies alba* 2301.
- Lophodermium laricinum,**
Larix defoliation, association *Adelges* grazing 540.
- Loranthaceae,**
host-pathogen interactions, *Atkinsonia ligustrina*, *haustoria*, xylem transport 5790.
- Lotus corniculatus,**
nodulation, *Rhizobium* soils inoculation 5128.
root rot, *Fusarium* 5681.
wilt, *Pseudomonas viridiflava* 6744.
- Lubricants,**
additives, microbial activity, measuring techniques 705.
biodegradation, microorganisms 9255.
- Lucerne transient streak virus,**
RNA, induction, lesions, *Chenopodium amaranticolor* 5779.
- Luciferase,**
bacteria, +3 α -hydroxysteroid dehydrogenase, bioassays, bile acids 9020.

Luciferin 2-monoxygenase,
subunits, 1-diazo-2-oxoundecane binding, photoaffinity labelling, *Vibrio harveyi* 2800.

Luciferin 4-monoxygenase (ATP-hydrolysing),
bioassays, ATP levels, bacteriuria 9928.

Lucknomycin,
antifungal activity, *Candida*, *Aspergillus*, susceptibility 7182.

Ludwigia perennis,
rice necrotic mosaic virus infection effects on growth 5777.

Luffs acutanyula,
pollen, effects on, spore germination, *Pseudoperonospora cubensis*, downy mildew 5011.

Luminescence,
use control *Photobacterium leiognathi* culture 891.

Luminous bacteria,
aldehydes, isolation, characterization 8372.
bioassays, toxicity testing, water 3572.

Luncheon meat,
food contamination, *Bacillus*, micrococci, *Streptococcus*, factors affecting spoilage 2029.
food processing, bacteria, food spoilage, heat treatments, effects on 6678.
spoilage, shelf life, *Bacillus*, *Streptococcus* 4872.
vacuum packaging, factors affecting gram-negative bacteria growth 4878.

Lung,
layage, effects on *Escherichia coli* 682.
Mycoplasma hyorhinus, cells, media (selective), *Mycoplasma hyorhinus* 4491.
secretions, fungi detection, indirect fluorescent antibody test, man 9079.

Lunulospora curvula,
cellulose decomposition 2903.

Lupinosis,
grazing animals, relationship, *Lupinus* fungi infection 5005.

Lupinus,
bacteroids viability, *Rhizobium* 7860.
diseases, fungi, viruses, association, crop rotation 4985.
fungi infection, relationship, grazing animals lupinosis 5005.
infection, peanut mottle virus, epidemics 2985.
isoflavones, antifungal activity 7095.
nitrogen-fixing bacteria inoculation, nitrogen fixation 5952.

Lupinus albus,
disease resistance, powdery mildew, *Erysiphe polygoni* 9467.
disease resistance, wilt, *Fusarium oxysporum* f.sp.lupini 9461.
isoflavones, antifungal activity 7095.
roots, growth, microorganisms effects on 582.

Lupinus alpinus,
nitrogen nutrient uptake, inhibition nitrogen fixation 8685.

Lupinus angustifolius,
nodules, nitrogen-fixing bacteria, cobalt effects on 3241.

Lupinus angustifolium,
disease resistance, powdery mildew, *Erysiphe polygoni* 9467.
fungi infection, relationship, grazing animals lupinosis 5005.
infection, *Phytophthora cinnamomi*, chlamydospores formation, survival, soil 5693.
seeds, phomopsis leptostromiformis, infection, detection, methodology 1811.

Lupinus cosentinii,
fungi infection, relationship, grazing animals lupinosis 5005.

Lupinus luteus,
disease resistance, powdery mildew, *Erysiphe polygoni* 9467.
nitrogen nutrient uptake, inhibition nitrogen fixation 8685.
nitrogen-15 distribution, bacteroids, nodules, *Rhizobium*, nitrogen fixation 9615.

Lupinus mutabilis,
disease resistance, powdery mildew, *Erysiphe polygoni* 9467.

Luteovirus,
enzyme-linked immunosorbent assay identification 1768.

Lycium,
host range, alfalfa mosaic virus, plant diseases 3085.

Lycoperdon perlatum,
Pinus radiata, *Pseudotsuga menziesii*, New Zealand 7774.

Lycopersicon esculentum,
Alternaria solani early blight, computer applications predictions, USA 4011.
Alternaria solani, leaves lesions, measuring techniques, computer applications, video image analysis 4924.
1-minocyclopropane-1-carboxylate synthase, *Streptomyces griseolus*, sinefungin, inhibition, ripening 7593.
Botrytis cinerea infection, role cellulose decomposition 5794.
Brachycaudus helichrysi, potato virus Y transmission 4044.
bunchy top, new records, India 3042.
callus, disease spread, potato spindle tuber viroid, tomato ringspot virus, potato virus M 5793.
canker, pathogenesis, *Corynebacterium michiganense* subsp.*michiganense*, yield 8579.
Cladosporium fulvum, extracts, enhancement, necrosis 3100.
corky root 1264.
Corynespora cassiicola infection, incidence, India 5009.
cultivars, disease resistance, *Verticillium dahliae* wilt 5043.
developmental stages, effects on susceptibility, *Pseudomonas syringae* pv.tomato infection 2234.
disease resistance, speck, *Pseudomonas syringae* pv.tomato 5049.
early blight, sulfur dioxide air pollution effects on 6619.
enzymes, defense mechanisms, wilt, *Verticillium albo-atrum* 4077.
epidemiology, root rot, *Fusarium oxysporum* f.sp.radicis-lycopersici 3998.
fruit rot, *Botrytis cinerea*, *Colletotrichum atramentarium*, *Glomerella cingulata*, pectinase 5797.
fruit rot, pathogenicity, *Colletotrichum*, *Glomerella* 1301.
fruit rot, *Pleospora infectoria*, extracellular enzymes effects on pathogenesis 4015.
fruit rot, *Sclerotium rolfsii*, *Septoria lycopersici*, *Alternaria*, *Colletotrichum* 6807.
fruits, disease resistance, ripening defects, association, tobacco mosaic virus infection 4094.
fruits, infection, pathogenicity, tomatine resistance *Fusarium solani* 6741.
fruits, *Rhizopus stolonifer* infection, pathogenesis 8590.
fruits, sterol composition, association, pathogenicity, *Fusarium solani* 7049.
Fusarium oxysporum f.sp.lycopersici wilt, nitrogen nutrition effects on 411.
Fusarium wilt, disease control, use, antagonists 1354.
grey mold, *Botrytis cinerea*, dicarboximides resistance, greenhouses 6884
growth factors, production, *Meloidogyne incognita*, interaction, *Fusarium oxysporum* f.sp.lycopersici, effects on 1276.

Lycopersicon esculentum, (continued)
hop stunt disease virus infection, localization, leaves cells 313.
hypersensitive response, histopathology, infection, *Cladosporium fulvum* 1249.
infection, *Fusarium oxysporum* f.sp.lycopersici, tomato mosaic virus, interaction 9397.
infection, viruses, fungi, relationship, acids solubility proteins electrophoresis 2963.
late blight pathogenesis, role, sterol composition, light intensity effects on 5785.
lateblot, *Septoria lycopersici*, disease control, plant breeding 5048.
leaves extracts, antifungal activity 695.
leaves, infected, potato spindle tuber viroid double-stranded RNA 3044.
mutants, *Rhizopus stolonifer* infection, effects on, cellulase, pectinolytic enzymes 5773.
necrosis, *Pseudomonas syringae* pv.tomato, etiology 3065.
Phytophthora infestans infection, proteinase inhibitors purification 5772.
Phytophthora infestans infection, sterol esters, sterol glycosides content, relationship, susceptibility 3983.
Phytophthora infestans, late blight, *Alternaria solani*, early blight 8572.
Phytophthora nicotianae var.*parasitica* buckeye rot, fertilizers content, nitrogen, phosphorus, potassium, effects on 9445.
plant breeding, disease resistance, speck, *Pseudomonas syringae* pv.tomato 6842.
post-harvest decay, *Erwinia carotovora* subsp.*carotovora*, temperature, suspensions depth effects on 1330.
Pseudomonas corrugate infection, pathology 2223.
Pseudomonas syringae, enhancement, cryomycin 2224.
root rot, calypateia campanula, new records 4026.
root rot, fungicides disease control 6872.
roots exudates, *Glomus fasciculatus* growth, ozone pollution effects 7811.
roots, penetration, pathogenesis, association, *Fusarium oxysporum*, *Fusarium oxysporum* f.sp.pisi, *Verticillium albo-atrum* 6825.
roots, plant diseases, fungi, bacteria 9411.
seedlings roots, infection, *Verticillium albo-atrum*, *Fusarium oxysporum* f.sp.lycopersici, pathogenesis 4028.
seedlings screening, plant breeding, disease resistance, *Verticillium dahliae* wilt 5045.
seeds, *Pseudomonas syringae* pv.tomato infection, survival 412.
speck, disease control, *Pseudomonas syringae* pv.tomato, speck, *Lycopersicon esculentum* 5822.
speck disease resistance 1381.
speck, *Pseudomonas syringae* pv.tomato, disease control, fungicides, streptomycin, speck, *Pseudomonas syringae* pv.tomato, disease control, fungicides, streptomycin, *Lycopersicon esculentum* 5822.
speck, *Pseudomonas syringae* pv.tomato, disease spread, environmental factors 1297.
speck, *Pseudomonas syringae* pv.tomato, scanning electron microscopy, pathology 2233.
stems, detection, Phoma exigua var.*foveata* infection 4031.
stems, *Pseudomonas corrugata* necrosis incidence, USA, Florida 5025.
susceptibility, *Fusarium oxysporum* f.sp.lycopersici, *Meloidogyne incognita* infection, effects on 1281.
tobacco mosaic virus infection, germplasm, seeds, embryos 2184.
tomato bushy stunt virus, disease transmission, vectors, man 1308.
tomato leaf curl virus infection, factors affecting disease control 8614.
tomato mosaic virus infection, persistence, crop residues, soil 1233.
tomato yellow leaf curl virus, disease spread, cultivation techniques 1236.
tomato yellow top virus infection, new records, New Zealand 9435.
+*Verticillium dahliae* infection, plant extracts, antifungal activity, *Cladosporium cucumerinum* 6877.
viruses infection, Jordan 6793.
white leaf disease, cucumber mosaic virus, RNA, relationship, infectivity 2195.
white leaf disease, role, cucumber mosaic virus, satellite RNA 1292.
wilt, *Fusarium oxysporum* f.sp.lycopersici, cytopathology 3088.
wilt, *Fusarium oxysporum* f.sp.lycopersici, etiology 1257.
wilt, *Fusarium oxysporum* f.sp.lycopersici, integrated control, nitrate, +calcium oxide+benomyl 4107.
wilt, *Fusarium oxysporum* f.sp.lycopersici, integrated control, benomyl+nitrate+calcium oxide 4108.
wilt, *Fusarium oxysporum* f.sp.lycopersici, interaction *Meloidogyne javanica* 3990.
wilt, *Pseudomonas solanacearum*, disease resistance 1380.
wilt, *Pseudomonas solanacearum*, grafting, disease resistance 3130.
wilt, *Pseudomonas solanacearum*, soil, vertical distribution 5759.
wilt, *Pseudomonas solanacearum* survival, USA, North Carolina soil 8675.
wilt, *Verticillium albo-atrum*, pathogenicity, genetic analysis 3049.
yellows, effects on, yield, food quality 1311.
yield, tobacco mosaic virus infection 2167.

Lycopersicon hirsutum,
inheritance, disease resistance, speck, *Pseudomonas* tomato 5036.

Lycopersicon lycopersicon,
pollen, antifungal activity, *Alternaria alternata*, *Helminthosporium oryzae* 8605.

Lycopersicon peruvianum,
inheritance, disease resistance, speck, *Pseudomonas* tomato 5036.

Lycopersicon pimpinellifolium,
inheritance, disease resistance, speck, *Pseudomonas* tomato 5036.
Pseudomonas solanacearum wilt, disease resistance 6791.

Lycopodium,
vesicular-arbuscular mycorrhizans, morphology 2327.

Lymantria dispar,
biological control, *Bacillus thuringiensis*, parasitism, *Rogas lymantriae* 7477.
biological control, *Bacillus thuringiensis*+*Apanteles melanoscus*, pathogens 2632.
biological control, nuclear polyhedrosis virus, U.V. radiation protection virulence 7475.
biological control, pest control, nuclear polyhedrosis virus 7476.
dose-response effects, *Bacillus thuringiensis*, biological control, mathematical models 8362.
interaction, *Apanteles melanoscus*, role, *Bacillus thuringiensis* aerial applications 3722.
nuclear polyhedrosis virus infectivity, U.V. radiation inactivation effects on 2487.

Lymphoblastoid cell lines,
Epstein-Barr virus, antiviral activity, ara-A, erythro-9-(2-hydroxy-3-nonyl)adenine 6067.

Lysates,
Phystrum polycapalum, mRNA isolation methodology 7268.

- β-Lysin**, antibacterial activity, *Escherichia coli*, association outer membranes 3316.
- Lysine**, biocynthesis, *Brevibacterium flavum*, *Corynebacterium glutamicum*, nitrogen sources 3656.
- Brevibacterium flavum*, biosynthesis, continuous culture 2747.
- derivatives, synthesis, inactivation phases 1577.
- fosfomycin derivatives, antibacterial activity 8890.
- Micrococcus glutamicus*, production 5485.
- microorganisms production, +wheat flour, nutritive value, rats 5632.
- production, *Brevibacterium lactofermentum*, *Escherichia coli*, whey 3655.
- production, use, DL-α-amino-ε-caprolactam, *Cryptococcus*, *Pseudomonas* 6395.
- residues, formate dehydrogenase active sites, chemical modification, bacteria 739.
- sodium chloride, effects on, levels, *Saccharomyces cerevisiae*, growth 17.
- L-Lysine**, biosynthesis, *Brevibacterium suppressors* mutants 4571.
- excretion, S-(2-aminoethyl)-L-cysteine resistant mutant, *Bacillus subtilis* 9122.
- Lysine decarboxylase**, mechanisms, stereospecificity, *Bacillus cadaveris* 6533.
- stereochemistry, *Escherichia coli*, *Bacillus cadaveris* 6506.
- Lysine-2,3-aminooxalase**, stereochemistry 75.
- stereochemistry, *Clostridium subterminale* 75.
- Lysiniolmin**, derivatives, aminoacylation 1684.
- Lysine**, biosynthesis, *Brevibacterium*, molasses effects on 7643.
- Lysine**, bacteria, isolation, activated sludge, role, decontamination, USSR 8062.
- bacteria, phages, use, Inc plasmids classification 9679.
- Gaumannomyces graminis var. tritici, *Phytophthora cinnamomi*, *Cochliobolus sativus*, role, *Leptomyxidia*, soil 563.
- Micrococcus luteus*, *Staphylococcus aureus*, albumin lysozyme antibacterial activity 7052.
- muramidase, activity, use, differentiation, *Streptococcus* group A 3547.
- phages, aeration induction, *Bacillus thuringiensis* subsp. *thuringiensis*, culture 6314.
- Vibrio cholerae*, Tris+EDTA treatment, association nitrofurantoin resistance 7927.
- Lysobacter enzymogenes**, enzymes biosynthesis, factors affecting 8297.
- Lysocitrin**, antibacterial activity, association, fatty acid composition, *Mycobacterium tuberculosis* 4286.
- permeabilized mice 3T3 cells, interferon induction antiviral state 3370.
- Lysophospholipids**, analogs, antifungal activity 4299.
- Lysosomes**, proteinase, purification, characterization, *Physarum flavicomum* 9144.
- Lysosome**, activity, *Micrococcus luteus* cell walls, humic acids interaction effects on 590.
- albumin, antibacterial activity 7052.
- preservatives, seafood 2934.
- Ixodidae**, eggs, *Ixodidae* 1552.
- Lytic enzymes**, analysis, microorganisms 7369.
- Staphylococcus aureus*, *Staphylococcus simulans*, *Staphylococcus saprophyticus*, isolation, characterization 92.
- Streptomyces*, lysine, yeasts cell walls, single-cell protein 7583.
- Trichoderma harzianum*, use, control, *Gams anisus* 4156.
- use, sphaeroplasts formation, *Trichoderma reesei* 6346.
- Macclain**, biodegradation, *Sclerotinia trifoliorum* 2000.
- Cicer arietinum, metabolism, *Fusarium solani* 3779.
- Macadamia integrifolia**, root rot, *Kretschschmaria clavus* infection, perithecia relationship 5731.
- Macroleptota zeyheri**, nutritive value, characterization 3846.
- Macrolide antibiotics**, antibacterial activity 8041.
- antibiotic resistance, *Enterobacteriaceae*, animal isolates 660.
- antibiotic resistance, *Streptococcus*, mastitis isolates 2398.
- antiviral activity, influenza A virus, influenza B virus, Rous sarcoma virus, variola virus 7941.
- biosynthesis relationship, *Streptomyces* protoplasts regeneration 6166.
- drug interaction, 1681.
- erythronolide B conversion 6167.
- Escherichia coli* antibiotic resistance, plasmid pKH80 relationship 631.
- milbemycins biosynthesis, *Streptomyces*, characterization 6217.
- resistance, gram-positive bacteria, lysoxin effects on, pigs isolates 5156.
- Staphylococcus aureus*, antibiotic resistance 9646.
- Streptomyces*, biosynthesis 8919.
- Streptovorticillum kitasatoensis*, *Streptomyces fradiae*, biosynthesis, role, valine 8820.
- structure 6212.
- structure-activity relationships, antibacterial activity 3377.
- Macromolecules**, phosphorus, levels, *Phalaris aquatica* decomposition, soil microorganisms 573.
- Macromycin**, C.D., I.R. spectroscopy 2826.
- Macrophages**, drug sensitivity testing, *Mycobacterium leprae*, in vitro, radioactive labelling 9659.
- Mycobacterium leprae* infected, rifampicin antibacterial activity, radioactive labelling 9658.
- Macrophoma**, fruit rot phytotoxins, isolation 8522.
- phytotoxins, macrophorins, isolation, structure 6718.
- Macrophoma phaseolina**, carbon sources effects on cellulase production 1932.
- charcoal rot disease transmission, *Cylindrocladus adspersus* role, *Helianthus* 4800.
- Macrophoma phaseolina**, (continued) annuus 9444.
- charcoal rot, *Helianthus annuus*, incidence, distribution, Spain 9416.
- disease control, benomyl foliar applications, metham fumigation, *Glycine max* 5060.
- drug resistance, fungicides 650.
- infection, *Brassica juncea*, phospholipase A2 effects on pathogenesis 4005.
- infection, *Crotalaria juncea*, seeds, pathogenesis 1272.
- infection, *Cucumis melo*, role, transmission (seed) 3979.
- Mangifera indica* charcoal rot, symptoms 2222.
- pathogenicity, soil-borne diseases, *Euphorbia lathyris* 5002.
- rot, seed-borne diseases, pathology, *Sesamum indicum* 5022.
- saprophytism, *Glycine max* stems, herbicides effects on 2380.
- sclerotia germination, competition, environmental stress, nutrient availability, soil 9573.
- sclerotia, germination, nutrient availability, fungistasis, soil 9572.
- sclerotia, soil isolates, media (selective) 1815.
- seed-borne diseases, *Pisum sativum*, detection 6732.
- spore germination, fungicides, antibiotics, effects on 7760.
- Macrophorins**, *Macrophoma*, isolation, structure 6718.
- Macroptilium atropurpureum**, Australia, Rhizobium isolation, characterization 6990.
- crop production, *Liriodendron appendiculatum* infestation effects on, Australia 8589.
- Rhizobium japonicum symbiosis, characterization 8700.
- Macrosporium euphorbiae**, vectors, disease transmission, potato virus Y, plant disease 9400.
- Macrosteles fascifrons**, disease transmission, *Spiroplasma citri*, plant diseases 6803.
- Macrosteles sexnotatus**, disease transmission, mycoplasma-like organisms, plant diseases 9399.
- vectors, yellows, mycoplasma-like organisms 9398.
- Macrotermes michaelsoni**, termitaria mounds, soil microorganisms, community composition 5906.
- Macrotermes subhyalinus**, termitaria mounds, soil microorganisms, community composition 5906.
- Macrotyloma uniflorum**, nodulation, Rhizobium, isolation, screening 2360.
- Maedi virus**, antibodies, detection, enzyme-linked immunosorbent assay, sheep, goats 2651.
- Maglicade septendecim**, wounds, association, *Hypoxylon mammatum*, infection 8658.
- Magnesium**, effects on enolase substrates binding, N.M.R., yeasts 6544.
- effects on glutamine synthetase kinetics, *Micrococcus glutamicus* 6511.
- effects on phosphate-dissolving bacteria inoculation, yield, *Vicia faba* 5892.
- effects on, ticarcillin: tobramycin, antibacterial activity, *Pseudomonas aeruginosa* 754.
- enhancement, *Limulus* lysate test, sensitivity, detection, endotoxins 5379.
- interaction, acetyl-CoA carboxylase, biotin binding sites, N.M.R., acetyl-CoA carboxylase 4632.
- ions concentration effects on, *Lysobacter enzymogenes* enzymes biosynthesis 8297.
- leaves lesions, leafspot susceptibility, *Xanthomonas campestris*, *Capsicum* 5841.
- tobacco mosaic virus infection, *Solanum melongena*, effects on susceptibility 3033.
- toxicity, nickel resistance, *Neurospora crassa* 7906.
- Magnesium chloride**, +nibofavin, +aromatic compounds, photoactivation, bactericidal activity, *Salmonella typhimurium*, media (culture) 8781.
- Magnolia**, forests, mortality factors, pathogens, fungi 4171.
- Magnolia obovata**, extracts, antibacterial activity, *Streptococcus* mutants 1559.
- plant extracts, antibacterial activity, *Streptococcus* mutants 2433.
- Magnolia officinalis**, extracts, antibacterial activity, *Streptococcus* mutants 1559.
- Mahonia**, taxonomy, rust, *Cumminsella* 423.
- Maize chlorotic dwarf virus**, disease transmission, pesticide applications, soil, carbofuran, vectors, *Graminella nigrifrons*, *Rhopalosiphum maidis* 7738.
- infection, *Zea mays*, transmission, symptoms, control 5723.
- stunt, *Zea mays*, *Graminella nigrifrons* vectors, sex differences 5697.
- susceptibility, *Zea* 4947.
- Maize chlorotic mottle virus**, host range, *Gramineae* 4949.
- incidence, soil fumigation, *Zea mays*+*Sorghum* crop rotation effects on 2116.
- infection, *Zea mays*, disease control 1191.
- infection, *Zea mays*, transmission, symptoms, control 5723.
- susceptibility, *Zea* 4947.
- Maize dwarf mosaic virus**, disease resistance genes, levels, genetic analysis, plant breeding, *Zea mays* 4092.
- disease resistance, plant breeding, *Zea mays* 8604.
- disease transmission, pesticide applications, soil, carbofuran, vectors, *Graminella nigrifrons*, *Rhopalosiphum maidis* 7738.
- infection, disease resistance, *Zea mays*, Hungary 7745.
- infection, disease resistance, *Zea mays*, inheritance 6841.
- infection, effects on, *Zea mays* susceptibility, *Helminthosporium maydis* infection 1185.
- infection, *Sorghum bicolor*, pathogenesis 5724.
- infection, *Zea mays*, effects on susceptibility, *Helminthosporium maydis* infection 368.
- infection, *Zea mays*, transmission, symptoms, control 5723.
- inoculation, *Sorghum bicolor*, spraying pressure effects on pathogenicity 6774.
- mixed infection interaction *Helminthosporium maydis*, *Zea mays* 3007.
- plant viruses, vectors, *Schizaphis graminum*, disease transmission, *Gramineae* 5704.
- Sorghum bicolor*, seedlings, susceptibility 6747.
- susceptibility, germplasm, *Pennisetum americanum* cultivars 9360.
- susceptibility, *Zea* 4947.
- transmission, *Sorghum halepense*, *Zea mays* 4971.
- Maize dwarf mosaic virus**, infection, *Gramineae* susceptibility, USA, Mississippi 8559.
- Maize mosaic virus**, infection, *Zea mays* 2119.

Maize mosaic virus, (continued)
infection, Zea mays, transmission, symptoms, control 5723.

Maize rayado fino disease virus,
Zea mays isolates, purification, biological properties 364

infection, Zea mays, transmission, symptloms, control 5723.

Maize rough dwarf virus,
infection, Zea mays, symptoms 8561.
infection, Zea mays, transmission, symptoms, control 5723.

Maize streak virus,
host range, Gramineae 6778.
infection, Zea mays, disease control methodology 461.
infection, Zea mays, transmission, symptoms, control 5723.
susceptibility, Zea 4947.

Maize stripe virus,
susceptibility, Zea 4947.

Maize white line mosaic virus,
detection, soil, infection plants, disease transmission, USA, Ohio 1200.
mosaic disease asymptomatic infection, Zea mays, incidence 4969.

Malaria,
man, bredinin antimalarial activity 1589.

Malate dehydrogenase,
Pseudomonas thermophila, production, purification 1899.
³⁵S-ray scattering, *Halobacterium marsonii* 331.

D-Malate dehydrogenase (decarboxylating),
+trayate dehydrogenase bifunctional enzymes, *Rhodospseudomonas sphaeroides*,
purification, characterization 7415.

Malathion,
degradation, fungi, stored products, grain, *Aspergillus glaucus* 7557.
hydrolysis, *Arthrobacter*, enzymes, characterization 8416.

Malaysia,
Cyindrodactylum scoparium, diseases, forests trees 2316.
Hevea brasiliensis, cellulose, lignins, post-harvest decay, decay fungi 7791.

Maleic acid,
+benzethonium chloride+methoxyethylene, antibacterial activity, in vivo, in vitro 6241.

Maleleuca quinquevneria,
infection, fungi, disease resistance 5086.

Malic acid,
production, association, *Brevibacterium flavum* immobilization, use, carrageenans,
polyethyleneimine 4494.

Malolactic fermentation,
Leuconostoc oenos, solids effects on, wine 3757.

Malononitril,
N.M.R. 4405.
Streptomyces rimosus var.paranomycinus, biosynthesis, N.M.R. 4406.

Malonyl-CoA decarboxylase,
Mycobacterium tuberculosis, purification, characterization 8245.

Melittinhexase,
production, use, *Bacillus circulans* α -amylase 80.

Melittose,
+media (selective), *Lactobacillus* association *Streptococcus thermophilus*,
enumeration 3571.

Melittose-binding protein,
ligands binding, *Escherichia coli* 2734.
purification, characterization, periplasmic space, *Escherichia coli* 6373.

Melus,
amino acids, viruses infection effects on, nitrogen association 4974.
Entomophora, biological control, granulosis virus 8355.
Botryosphaeria dothidea white rot development, association, fructose content, pH 4975.
fruit rot, incidence, disease control 3031.
Glomus epigaeum symbiosis, effects on growth 5097.
Ilarvirus isolates, association, mosaic disease, ringspot, dwarf disease 5740.
Podosphaera leucotricha powdery mildew, disease resistance 7739.
powdery mildew, disease control 4113.
powdery mildew, slides preparation 6351.
proliferation disease, mycoplasma-like organisms, tetracycline treatment 3023.
rootstocks, disease resistance, canker, *Basidiomycetes* 2259.
scab, temperature, relative humidity, effects on pathogenesis 2149.
scab, *Venturia inaequalis* overwintering 1201.
temperature effects on *Venturia inaequalis* fruit bodies development 1224.
Venturia inaequalis infection, ascospores, pathogenesis 7683.
viruses infection, nitrate effects on 3027.

Malus domestica,
disease spread, *Glomerella cingulata*, ascospores, epidemiology 8570.
necrosis, decline, tomato ringspot virus, *Xiphinema* vectors 4978.
Pisolithus tinctorius effects on roots growth, association, indole-3-acetic acid 591.
post-harvest decay, calcium, effects on, *Penicillium expansum* 8598.
powdery mildew, temperature effects on buds 1211.

Malus pumila,
apple mosaic virus, disease control, antiviral agents injection 9500.
bitter rot, *Glomerella cingulata*, pathogenicity 9377.
blight, *Nectria cinnabarina*, disease control, benomyl, captafol 4120.
buds, fireblight, *Erwinia amylovora* 1225.
disease resistance, canker, *Nectria galligena*, *Pezizella malicorticis*,
Phytophthora cactorum, *Stereum purpureum* 1357.
deterlents, *Aspergillus niger*, wastewater treatment 8054.
dormancy, *Podosphaera leucotricha* powdery mildew, fungicides treatment 1398.
endomycorrhizae colonization, growth, phosphorus nutrient availability effects on 9543.
Erwinia amylovora amylovorin host specificity 9371.
fruit rot, *Glomerella cingulata* 1215.
fruit rot, *Mycosphaerella pomii*, disease control, fungicides 1392.
fruits, benzolic acid production, disease resistance, *Nectria galligena* 4081.
fruits, carbohydrates levels, apple mosaic virus effects on 8562.
fumigants, disease control 492.
fumigants, disease control, *Sclerotium rolfsii* blight, *Botryosphaeria dothidea*
canker, *Phytophthora cactorum* collar rot, *Clitocybe tabescens* root rot 492.
neoceros, tobacco ringspot virus 6783.
nutrient uptake, phosphorus, nutrient availability, endomycorrhizas 9544.
orchards, canker, *Botryosphaera dothidea* 1223.
orchards, incidence, *Phytophthora* 386.
orchards, roots growth, rhizosphere microorganisms phytotoxins inhibition 4141.
pathology, fruit rot, *Phomopsis mali* 2145.

Malus pumila, (continued)
Phytophthora cactorum collar rot, metalaxyl effects on pathology 505.
plant diseases, fungi, baycor, disease control 1421.
powdery mildew, *Podosphaera leucotricha*, disease control, fungicides 2281.
powdery mildew, *Podosphaera leucotricha*, fungicides, disease control 2280.
Pseudomonas syringae pv.*papularis* susceptibility, seasonal variations 400.
scab, *Venturia inaequalis*, pathogenesis, disease control, mathematical models 5734.
seedlings, fireblight, *Erwinia amylovora*, screening fungicides, disease control 1406.
Venturia inaequalis scab, fungi biological control 5825.
viruses infected, nitrate, nutrition, effects on 389.
white rot, *Botryosphaeria dothidea*, pathogenicity 5739.
white rot, *Conolus versicolor*, disease control, pruning wounds, fungicides 6873.

Mamestra brassicae,
biological control, synergism, +deltamethrin 9208.
nuclear polyhedrosis virus, epizootology, soil 1470.

Mammalia,
deoxynonuclease, *Aspergillus* aflatoxins effects on 7613.
lactoferrin, transferrin, conalbumin antibacterial activity, relationship
microflora immune response, reviews 5176.
metabolism, microorganisms drugs production, models, conferences 7467.
nontarget organisms, pathogens, biological control, safety regulations 1025.
pencycuron toxicity, animal models 3155.

Mammary gland,
cattle, bacteria infection, penicillin G+streptomycin treatment, isolates
susceptibility 8951.

Man-made products,
biodegradation, biodegradation, environmental effects 4758.

Mancozeb,
antibacterial activity 8633.
antibacterial activity, nitrogen-fixing bacteria, *Eichloria crassipes* isolates 8741.
antifungal activity, *Choanephora cucurbitarum* 4004.
antifungal activity, in vitro, *Phytophthora palmivora* 5824.
Brassica campestris, effects on leaf surface fungal flora 3146.
disease control, leafspot, *Apium graveolens* 4098.
disease control, *Pteronospora parasitica*, downy mildew, *Brassica pekunensis* 8631.
effects on *Conidiobolus obscurus* resting spores sporulation 7762.
Entomophthoraceae infection, *Aphis fabae*, effects on 489.
+metalaxyl, prophylaxis, treatment, *Phytophthora palmivora* infection, orchards 5828.
resistance, *Bipolaris oryzae*, *Bipolaris sorokiniana*, brown spot, *Zizania aquatica* 6023.
treatment, brown spot, *Drechslera oryzae*, *Drechslera sorokiniana*, *Zizania aquatica* 2722.
use, leafspot disease control, *Dioscorea dumetorum* 5061.

Mandelate dehydrogenase,
Acinetobacter calcoaceticus, expression regulation 8286.

Maneb,
disease control, leafspot, *Pestalotzia palmarum*, *Helminthosporium*, *Cocos nucifera* 1391.
disease control, *Phytophthora palmivora* canker, *Canca papaya* 5058.
disease control, *Pseudomonas syringae* pv.*tomato*, speck, *Lycopersicon esculentum* 5822.
effects on *Nicotiana tabacum* microflora 496.
Entomophthoraceae infection, *Aphis fabae*, effects on 489.

Mangnese,
bacteria uptake, wastewater treatment 5313.
effects on enolase substrates binding, N.M.R., yeasts 6544.
effects on glutamine synthetase kinetics, *Micrococcus glutamicus* 6511.
ions concentration effects on, *Lysoabacter* enzymogenes enzymes biosynthesis 8297.
bacteria back role, trace elements enrichment 9816.
toxicity testing, *Aspergillus flavus* spores use 9076.

Mangifera indica,
charcoal rot, *Macrophomina phaseolina*, symptoms 2222.
fungi infection, disease transmission, *Idioscopus cypealis*, *Cicadellidae* 3022.
pathogens, drug resistance, fungicides 1532.
Phytophthora infection, population structure 4977.

Mango,
post-harvest decay, *Alternaria alternata* latent infection role 6834.

Mangrove swamps,
biodegradation, isolates, yeasts, heterotrophic bacteria, biodegradation,
aromatic compounds 9253.

Manihot esculenta,
Aspergillus fumigatus, single-cell protein, nutritive value, rats, pigs 2932.
bacteria blight, symptoms, etiology 4022.
cassava latent virus mosaic disease, etiology, pathogenesis 9413.
cassava latent virus mosaic disease, transmission, *Nicotiana benthamiana*, tissues
ultrastructure 1315.
disease control, cassava common mosaic virus elimination, germplasm 1375.
disease resistance, *Xanthomonas campestris* pv.*manihoti* infection 2230.
disease transmission, host range, cassava common mosaic virus 1232.
inheritance, disease resistance, plant diseases, *Elsinoe brasiliensis* 6828.
mosaic disease, cassava common mosaic virus, heat treatments 1312.
post-harvest decay, bacteria, fungi, etiology 3102.
response, vesicular-arbuscular mycorrhizas inoculation, phosphorus treatment 4221.
Xanthomonas manihot blight, age effects on incidence, development 4016.
yield, leaves infection, cassava common mosaic virus 407.
yield reduction, cassava mosaic virus 1314.

Manihot utilisima,
soil, rhizosphere microorganisms metabolism 5918.

Mannans,
biosynthesis, *Escherichia coli* membranes 110.
Dictyophora indusiata, antitumour activity, mice 7453.
levels, infection monitoring, blister rust, mycorrhizas 3170.

Mannitol dehydrogenase,
purification, characterization, *Penicillium chrysogenum* mycelia, industrial
wastes isolates 5514.

Mannitol-binding protein,
Pseudomonas aeruginosa, characterization 2.

D-Mannohexase,
biosynthesis, *Candida* 1954.

- Mannoproteins**, characterization, mycelia, *Absidia cylindrospora* 7295.
- Mannose**, detection, gas chromatography, diagnosis, candidiasis 9993.
- β -D-Mannosidase**, *Bacillus subtilis*, viscosity, spectrophotometry 1901.
- extraction, soil 4215.
- D-Mannotriose**, biosynthesis, *Candida* 1954.
- Manure**, applications, association, *Rhizoctonia solani*, soil-borne diseases control, antifungal agents USA 323.
- cattle, composts, enzymatic activity, microflora, association 8061.
- Columbia, media (isolation), *Cryptococcus neoformans* 8154.
- pigs, degradation, coryneforms, odor compounds 8060.
- pigs, mesophilic bacteria, methanogenesis 4262.
- Sesbania rostrata*, effects on nitrogen fixation, *Oryza sativa* 4240.
- soil amendment, effects on *Rhizobium*, nodulation, yield, Glycine max 9582.
- soil amendment, soil microorganisms, enzymatic activity, redox potential, paddy fields, *Oryza sativa* 9623.
- +straw mixtures, methane production 9630.
- Marsamic acid**, *Lachnella villosa*, *Peniophora laeta*, effects on, RNA biosynthesis, DNA biosynthesis 6083.
- Marsamius**, decomposition, leaf litter, *Abies alba* 2301.
- Marburg disease virus**, indirect fluorescent antibody test, use β -propiolactone 3534.
- Marcellomycin**, actinosporangium *bohemicum* sp. nov., β -biosynthesis, antitumor activity 983.
- Margarillipes aquatica**, cellulose decomposition 2903.
- Mariane Islands**, *Canca* papaya, Erwinia canker, symptoms, *Achotina fulica* vectors 1222.
- Marinactan**, *Flavobacterium uliginosum*, biosynthesis, isolation, characterization, antitumor activity 7452.
- Marine environment**, bacteria, oil biodegradation 8719.
- environmental surveys, bacteria, association, bubbles, methodology 4495.
- methanogenic bacteria, isolates, high-performance liquid chromatography phospholipids assays 5382.
- microbial pollution, *Escherichia coli*, *Vibrio cholerae*, counting methods 6258.
- oil installations, sediments, hydrocarbons biodegradation 2392.
- Pseudomonas*, thiosulfate oxidation, enzymes isolation 7404.
- sediments, bacteria biomass measuring techniques, muramic acid, high-performance liquid chromatography 7252.
- sediments, *Vibrio parahaemolyticus* isolation 2051.
- survival, Enterobacteriaceae, in situ 3467.
- Vibrio cholerae*, attachment, Copepoda, association, epidemiology 2622.
- viruses, detection, sediments, collection, methodology 2655.
- Marine microorganisms**, aquatic bacteria, phytol biodegradation 5595.
- bacteria, biodegradation, marine pollution, nitrotriacetic acid, sewage effluents 5323.
- bacteria, polysaccharides characterization, intertidal environment 7443.
- Marine pollution**, beaches, sewage, pollution indicators, urease activity 3180.
- microbial pollution, measuring techniques, indicator species, *Pelecypoda* 8976.
- nitrotriacetic acid, sewage effluents, biodegradation, marine microorganisms, bacteria 5323.
- Marketing**, commercial species, bacteria, biological control, Insecta 1021.
- Marssonina brunnea**, infection, *Populus*, pathogenesis 549.
- Marssonina juglandis**, leaves penetration, anthracnose, *Juglans nigra* 3029.
- Martierella macrocystis**, infection, *Pseudotsuga menziesii* roots, incidence 4162.
- Martierella parvipora**, infection, *Pseudotsuga menziesii* roots, incidence 4162.
- Masoniella indica**, cellulose hydrolysis, amino acids, carbohydrates effects on 7547.
- Mass rearing**, *Agrotis segetum* larvae, production, granulosis virus, biological control 9211.
- Mass spectroscopy**, albomycin δ 1, albomycin δ 2, albomycin ϵ structure, *Streptomyces* 2573.
- amiprimycin structure 7177.
- hybrimycins 5244.
- iodole-3-acetic acid, mycorrhizas 8171.
- iturin A structure, *Bacillus* 9774.
- structure, antibiotics, reviews 8825.
- virginiamycin S5, viridogrisein II structure 5268.
- Mastris**, association, N,N-dimethyldecaneamine antibacterial activity, relationship, pH, temperature, *Streptococcus agalactiae* 5175.
- disease control, quaternary ammonium compounds, teat dips, antibacterial activity, cattle 1728.
- incidence, iodine teat dips, cattle 4462.
- milk, isolation, bacteria 3826.
- prophylaxis, udder hygiene, cattle 9820.
- Streptococcus*, *Streptococcus*, relationship udder hygiene, cattle 4453.
- teat dips prophylaxis, cattle 8071.
- udder hygiene, cattle 9819.
- Mathematical models**, activated sludge 1700.
- automated methods, enumeration, bacteria 9058.
- bacteria, colony-forming cells, growth, multiplication, soil 2345.
- bacteria deposition, glass capillary 9884.
- bacteria, excretion, surfactants, effects on, agar, surface tension, measuring techniques 5378.
- bacteria gas production, association, growth, kinetics 7833.
- batch culture growth kinetics, microorganisms 9831.
- butyric acid bacteria fermentation 9065.
- Mathematical models, (continued)**
- Candida utilis*, continuous culture, oxygen effects on ethanol production 4731.
- chlorothaloniol residues, *Solanum tuberosum* foliage, fungi 5819.
- Coffea arabica* rust, incidence *Hemileia vastatrix* infection 2150.
- denitrification, denitrifying bacteria, reviews 5110.
- disease spread, plant diseases 9382.
- drinking water coliforms, incidence 3484.
- epidemics, plant diseases, fungi 3906.
- growth, *Salmonella typhimurium*, *Staphylococcus aureus*, food, water activity 8468.
- identification, *Streptomyces hygroscopicus* cell culture, growth curves 3580.
- immobilized cells, fermentation, ethanol, reactors 3751.
- late blight, *Phytophthora infestans*, disease spread, *Solanum tuberosum* 9381.
- methane reactors, digestion (anaerobic), bacteria 5308.
- microorganisms polysaccharides activity, bioreactors 1064.
- pathogenesis, rust 3958.
- percolation reactors, hemicellulose hydrolysis, biomass conversion 9194.
- pesticide residues, chlorothaloniol deposition, *Solanum tuberosum* 1407.
- pesticide residues, chlorothaloniol deposition, *Solanum tuberosum* 1408.
- pesticides biodegradation, soil microorganisms 161.
- Phytophthora infestans*, disease spread, *Solanum tuberosum*, field trials 8593.
- plant diseases epidemics 3896.
- plant diseases pathogenicity, measuring techniques 1116.
- plant diseases, tissues disease spread 1117.
- population dynamics, growth, *Saccharomyces cerevisiae*, reactors 3633.
- roots, vesicular-arbuscular mycorrhizas spreading, phosphorus effects on 2329.
- sampling, bacteria, methodology 7258.
- Sclerotium rolfsii* growth 7265.
- soil, nutrient cycles, decomposition, books 5448.
- wastewater treatment reactors 1688.
- wilt, *Gossypium hirsutum*, plants growth relationship 2134.
- Mating types**, *Rhizoctonia solani*, taxonomy, pathogenicity, plant diseases, reviews 2974.
- Mayonnaise**, meat, growth, *Salmonella typhimurium*, *Staphylococcus aureus*, refrigeration 229.
- spoilage, *Saccharomyces exiguus*, *Saccharomyces dairenisi* 3612.
- McCoy cells**, cell culture, *Chlamydia trachomatis* detection, monoclonal antibodies conjugation fluorescein 9923.
- cotrimoxazole, trimethoprim, sulfamethoxazole, in vitro antibacterial activity, *Chlamydia trachomatis* 6008.
- MCB**, biodegradation, flooded soils, soil types, soil microorganisms, pathway, half-life 5971.
- Meals**, corn, bacteria effects on nutritive value 251.
- Measles virus**, antibodies detection, comparison, enzyme-linked immunosorbent assay, immune adherence hemagglutination, hemagglutination inhibition, hemolysis 8053.
- cell culture, factors affecting yield 1744.
- hemagglutination inhibition, filter paper methodology 9859.
- immunoglobulin G, detection, enzyme-linked immunosorbent assay 9857.
- immunoglobulin M, enzyme-linked immunosorbent assay 9013.
- radiomimoblasts 6289.
- trypan blue, inhibition, infection, tissue culture 7110.
- vaccines, immunogenicity, storage effects on 4429.
- Measuring techniques**, acetylene reduction, nitrogen-fixing bacteria, *Alnus rubra* nodules 1496.
- ATP levels, soil properties 568.
- calorimetry, glucose, metabolism, *Vibrio alginolyticus* 1772.
- cellulose biodegradation, soil 1058.
- Coulter nano-sizer, cell size, viruses, bacteria, fungi 2646.
- Escherichia coli* DNA(guanosine-6-methyltransferase 868.
- gas exchange, nitrogen-fixing bacteria, *Alnus rubra* nodules 1496.
- heat production association fermentation 1052.
- leaf litter decomposition, forests, eucalyptus 1447.
- marine pollution, microbial pollution, indicator species, *Pelecypoda* 8976.
- microbial activity, lubricants additives 705.
- microorganisms biomass oxidation, use, potassium dichromate 6287.
- nitrate reductase, *Rhizobium* 1507.
- nitrous oxide, soil denitrification, temperature association 612.
- oxygen uptake, *Saccharomyces cerevisiae* continuous culture 900.
- phosphorus, biomass, soil microorganisms 572.
- phosphorus mineralization, soil properties, forests 521.
- plaques diameter, phases 832.
- S-100 protein, enzyme immunoassay, labelling, *Escherichia coli* β -D-galactosidase use, cerebrospinal fluid, man 857.
- radiometry, *Mycobacterium fatty acids* metabolism 837.
- Saccharomyces cerevisiae*, bacteria β -D-galactosidase activity 3622.
- soil microorganisms, phosphorus, biomass 567.
- soil microorganisms, respiration, nutrient loss, microcosms 571.
- Triticum stem rust disease resistance, DNA hybridization 449.
- Meat**, animals carcasses, food contamination, *Campylobacter fetus* subsp. jejuni 1090.
- antimicrobial activity, sorbic acid 4810.
- bacteria contamination, 5622.
- bacteria contamination, surveys 223.
- bacteria, food contamination 3833.
- canned food, disease control, bacteria, fungi 3807.
- contamination, *Campylobacter fetus* subsp. jejuni, *Salmonella*, public health surveys 1081.
- contamination prevention, water chlorination 7611.
- cured products, potassium sorbate inhibition *Clostridium botulinum* growth 3857.
- food contamination 196.
- food contamination 197.
- food contamination, *Clostridium botulinum*, factors affecting growth 4790.
- food contamination, microorganisms, enumeration methodology 3613.
- food contamination, microorganisms, sewage sludge feeding regimes, cattle 4903.
- food contamination, *Pseudomonas aeruginosa*, pH effects on 4795.
- food contamination, *Staphylococcus aureus*, phage typing 2920.
- goats, frozen foods, contamination, *Bacillus cereus*, *Staphylococcus aureus*, *Streptococcus* 5606.
- indicator species 6669.
- isolates, *Clostridium perfringens*, antibiotic sensitivity testing, antibiotic

Meat, (continued)

- resistance 5235.
isolates, *Salmonella*, antibiotic sensitivity testing 9720.
isolation, bacteria 3826.
mayonnaise, growth, *Salmonella typhimurium*, *Staphylococcus aureus*, refrigeration 229.
microflora, fermentation products, effects on behavior, *Candae* 4928.
microorganisms food contamination, sampling methodology 9006.
packaging, carbon dioxide inhibition *Pseudomonas fluorescens*, spoilage 7610.
processing, bone, contamination, microorganisms 4783.
Salmonella control, radiation treatment, reviews 8481.
Salmonella isolates, serotyping 5627.
Salmonella isolation, media (enrichment) 4789.
Salmonella, media (isolation), surfactants, antibacterial activity 233.
shelf life, bacteria levels, storage conditions 7598.
spoilage, *Staphylococcus aureus*, psychrotrophic bacteria, yeasts, organoleptic properties, refrigeration 2038.
Staphylococcus aureus survival, freeze-thawing, pH effects on 4816.
starter cultures, *Lactobacillus plantarum*, phages, isolation, characterization 6676.
vacuum packaging, carbon dioxide packaging, Enterobacteriaceae, *Lactobacillus*, spoilage 4879.
Yersinia enterocolitica, media (isolation) 2049.

Meat industry,

- human carcasses, bacteria food contamination 5618.
occupational exposure, sepsis, *Streptococcus*, hygiene, man 2634.
poultry, food contamination, *Salmonella*, *Campylobacter fetus* subsp. jejuni 6663.

Meat production,

- food contamination, microorganisms 199.

Meat products,

- bacteria, enumeration 1083.
Clostridium perfringens food contamination, Chile 208.
food contamination, spoilage, lauricidin, preservatives 270.
preservation, sorbates, reviews 4873.
quality control, microorganisms food contamination 7566.
Salmonella growth inhibition, sodium nitrite, potassium sorbate use 3838.
Staphylococcus aureus, thermal injury recovery, preservatives effects on 264.
storage, spoilage, yeasts, coliforms, effects on taste panel evaluation 4771.
vacuum packaging, *Brochothrix thermosphacta* food contamination, biological control, *Lactobacillus* use 4835.
vacuum packaging, spoilage, fungi 4880.

Methicillinase,

- specificity, cell cycle, *Schizosaccharomyces pombe* 690.

Micellinam,

- +ampicillin, antibiotic synergism, antibacterial activity, gram-negative bacteria 9758.
antibacterial activity, macromolecules biosynthesis, *Streptococcus mutans*, *Streptococcus sanguis* 7135.
antibiotic sensitivity testing, *Salmonella*, *Shigella*, *Vibrio cholerae* 3407.
inhibition, *Mycococcus xanthus* cell division 752.
+ β -lactam antibiotics antibacterial activity 3314.
+nocardin A, antibacterial activity, cytotoxicity, inhibition protein biosynthesis, *Escherichia coli* 2555.

Microbiology,

- biodegradation, soil microorganisms 2878.

Media,

- agar, dehydration, incubation 819.
agar, selection, *Claviceps alkaloids* production 5562.
agricultural products, *Bacillus sphaericus* growth, sporulation 9041.
analysis, antibacterial activity, gentamicin, tobramycin, netilmicin, bacteria clinical isolates 7074.
characterization, association, *Cephalosporium acremonium*, cephalosporin C production 8843.
4-chlorobenzoic acid, *Pseudomonas* amino acids biosynthesis 7308.
copper, *Streptococcus* recovery 877.
comparison, enumeration, coliforms, sea water 9956.
composition effects on, *Lyso bacter* enzymes enzymes biosynthesis 8297.
differentiation, Enterobacteriaceae hydrogen sulfide biosynthesis 6603.
differentiation, yeasts 2722.
drug sensitivity testing, *Mycobacterium tuberculosis*, swabs culture methodology 829.
enumeration, bacteria, sulfate reduction 2689.
ethanol, yeasts growth, lipids biosynthesis 7468.
factor analysis, drug sensitivity testing, augmentin drug sensitivity testing, gram-negative bacteria 2697.
fermentation, yeasts separation techniques 9983.
fermentation, yeasts separation techniques 9984.
glycerol, *Acetobacter acetigenum* cellulose biosynthesis 111.
identification, *Proteus* 5403.
methodology, association, *Aspergillus flavus* aflatoxins production 1101.
methodology, *Bacillus thuringiensis* δ -endotoxin production 3888.
methodology, bacteria growth, β -amylase biosynthesis, fractionation 5428.
methodology, bacteria recovery, animals, pleural fluid, synovial fluid 3609.
methodology, milk products, *Streptococcus lactic acid* fermentation 5426.
methodology, rumen bacteria enumeration 9890.
methodology, 5-fluorocytosine drug sensitivity testing, *Candida*, *Torulopsis* 897.
Monilia, benomyl resistance, measuring techniques 7887.
nutrient requirements, rumen microorganisms, counting methods, cellulose biodegradation 10007.
optimization, *Streptomyces cremoreus* tobramycin biosynthesis 6227.
oxygen content, association, *Bacillus brevis* gramicidin S biosynthesis 6225.
oxygen content effects on *Bacillus brevis* gramicidin S biosynthesis 6226.
role, bacteria recovery, mice isolates 3546.
role, *Rhizobium* viability association storage 7242.
sermen cryopreservation, contamination, antimicrobial activity, nipagin 1591.
slide preparation, fungi 2723.
solutes, *Staphylococcus aureus* growth, water activity 864.
synthetic, *Yersinia pestis* pectin production 1680.
tissue culture, drug sensitivity testing, *Mycobacterium*, *Mycobacterium tuberculosis* 7911.

Media (culture),

- methodology, *Mycoplasma* 8142.

Media (culture),

- agar, comparison, liquid culture, *Pseudomonas aeruginosa*, *Escherichia coli* 9057.
agar diffusion test, aminoglycoside antibiotics 6102.
agar, freeze-drying, bacteria 5386.

Media (culture), (continued)

- agar, growth conditions, *Methanococcus maripaludis*, *Methanococcus voltae*, methodology 9050.
airborne microorganisms, *Deuteromycetes* 4512.
amino acids, *Bacillus stearotherophilus* auxotrophs 3608.
anaerobic conditions, *Mycoplasma hyosynoviae*, growth 2668.
antibiotic sensitivity testing, *Streptococcus* group B 7966.
antiserum, *Ureaplasma urealyticum* killing 833.
Aspergillus aculeatus, production, cellulase, growth conditions, effects on 3698.
Aspergillus niger, calcium gluconate production 6608.
bacteria, clinical isolates, cerebrospinal fluid 852.
Bacteroides, *Fusobacterium*, nutrient requirements 5415.
bioassays, antibiotics activity 7970.
bioassays, antibiotics antibacterial activity 7972.
bioreactors, *Hansenula polymorpha*, *Escherichia coli*, reviews 8084.
blood culture, sucrose effects on bacteria isolation 9930.
Campylobacter, aerobic conditions tolerance 5400.
Campylobacter fetus subsp. jejuni 2899.
cellobiose, *Blakeslea trispora* fermentation, β -carotene, β -D-glucosidase, biosynthesis 104.
cellulase production, *Trichoderma reesei* 6526.
cellulose structure, cellulosilytic microorganisms 6355.
cephalosporins biosynthesis, inoculum 1608.
Cercospora rosicola, effects on abscisic acid production 2731.
Clostridium acetobutylicum, effects on, acetone, butanol, production 2660.
Clostridium perfringens, enumeration 5420.
Clostridium saccharolyticum, ethanol, production, growth conditions 5575.
Clostridium sorbitelli, cytotoxicity, toxigenicity 8719.
counting methods, apparatus, aerobic bacteria 7213.
Cryptococcus neoformans, *Filobasidiella neoformans* perfect state 4538.
Cytospora abietis, extracts, *Arceuthobium abietinum*, *Abies magnifica* 5863.
dermatophyte fungi, identification 6354.
Endothia parasitica, nutrient requirements, methodology 1814.
Enterobacteriaceae, histamine production, seafood 2674.
enterotoxins biosynthesis, *Staphylococcus* 1115.
enzymes biosynthesis, *Keratinophilic* fungi, dermatophyte fungi 3630.
equipment, sterilization, γ radiation 707.
feces isolation, *Aeromonas*, *Plesiomonas* 9896.
ferrous sulfate, sodium metabisulfite, sodium pyruvate, effects on, *Campylobacter fetus* subsp. jejuni, morphology, motility, viability 9974.
Fonsecaea pedrosi 6344.
fungi growth monitoring, penicillin fermentation, computer applications 9754.
fungi growth monitoring, penicillin fermentation, computer applications 9755.
gases solubility, microorganisms, reviews 8082.
growth, *Thermus aquaticus*, continuous culture 2691.
Haemophilus influenzae, bacteremia diagnosis, children 9934.
Helianthus tuberosus, extracts, yeasts, single-cell protein, production 7606.
identification, *Clostridium difficile*, norfloxacin+tyrosine 9907.
identification, Enterobacteriaceae 6311.
identification, *Kingella dentrificans*, *Neisseria gonorrhoeae*, growth inhibition test 9925.
Lactobacillus acidophilus, whey 8146.
Legionella pneumophila, pH effects on isolation 9953.
Leptospira 5421.
magnesium chloride, photoactivation, riboflavin, bactericidal activity, *Salmonella typhimurium* 8781.
Metarrhizium anisopliae 8151.
methodology 5366.
methodology, *Bifidobacterium bifidum*, isolation, mutants 8133.
methodology, *Escherichia coli*, enterotoxins biosynthesis 9289.
methodology, *Escherichia coli*, enterotoxins biosynthesis, conferences 9881.
methodology, isolation, *Vibrio parahaemolyticus*, identification, *Vibrio alginolyticus* 2678.
methodology, *Sporidiesmum sclerotivorum*, sporulation 6356.
Mycobacterium, differential diagnosis 2704.
neutralization, *Staphylococcus aureus*, recovery methodology 5425.
Nocardia, effects on cholesterol biodegradation 2893.
organic compounds, effects on, *Fusarium oxysporum* f.sp. chrysanthemi, *Fusarium oxysporum* f.sp. lini, wilt 4040.
polyvinylpyrrolidone+Tween, *Leptospira interrogans* growth 9031.
preparation, bacteria, capsulation 6323.
Pseudomonas aeruginosa identification, association
9-chloro-9-(4-diethylaminophenyl)-10-phenylacridin 9954.
rosamicin biosynthesis, *Micromonospora rosaria* 2726.
Ruminococcus flavefaciens nutrient requirements 9891.
Shigella flexneri, *Corynebacterium pseudodiphthericum* 5418.
Staphylococcus aureus, effects on serotyping, antisera 881.
sterilization, decontamination, microorganisms 7963.
Streptococcus pyogenes, *Alcaligenes faecalis* 5411.
Streptococcus pyogenes growth, streptolysin O production 3895.
use antibiotics biosynthesis, microorganisms contamination 8803.
use, identification, *Streptococcus group B* 9976.
Vacuum, effects on mycorrhizas formation 6970.
sulfamycin, use, isolation, soil microorganisms, fungi 2709.
Vibrio cholerae, lipopolysaccharides production 3891.
water activity, liquid culture 3515.
wort, yeasts, fungi 2714.
Xanthomonas campestris, extracellular polymers, polysaccharides biosynthesis 2682.
Yersinia enterocolitica, identification 3804.
Zymomonas mobilis, ethanol production 3550.

Media (enrichment),

- acetic acid, bacteria 9880.
Campylobacter fetus subsp. jejuni 9944.
coliforms recovery, skim-milk 218.
comparison, *Salmonella* isolation, sewage 2675.
isolation, *Campylobacter fetus* subsp. jejuni 9936.
isolation, *Campylobacter fetus* subsp. jejuni, poultry, temperature, time, pH, effects on 8141.
isolation, *Salmonella*, food contamination, sausages 4766.
lignosulfonate, *Penicillium*, metabolism, biodegradation 3797.
methodology, *Vibrio fluvialis*, liquid culture, enumeration 8136.
Salmonella isolation 9061.
Salmonella isolation, chickens 9060.
Salmonella isolation, flocks 3617.
Salmonella isolation, meat 4789.

Media (enrichment), (continued)

- Salmonella typhimurium*, thermal injury recovery 3574.
Shigella flexneri, *Yersinia enterocolitica*, *Shigella sonnei*, *Salmonella typhimurium* 3576.
Yersinia enterocolitica 3606.
Yersinia enterocolitica, isolation, poultry 3566.
- Media (isolation),**
aerobic conditions, microenvironments, *Campylobacter*, methodology 9979.
sensitivity testing, *Enterobacteriaceae* 9711.
blood culture, cerebrospinal fluid 6331.
Cryptococcus neoformans, manure, Columbia 8154.
drinking water coliforms 3569.
Enterobacteriaceae, food contamination, dairy products, cocoa 1791.
Gardnerella vaginalis, clinical microbiology 9030.
Haemophilus vaginalis, vagina, cervix, man 8112.
heterotrophic bacteria, enumeration, freshwater environments 3557.
methodology, iron-depositing bacteria, iron-reducing bacteria 7259.
methodology, turkeys intestine isolates 8135.
Mycobacterium bovis, animal isolates 1792.
Mycoplasma pneumoniae 9872.
Neisseria gonorrhoeae, agar 9959.
polymyxin-erythromycin, *Yersinia pestis* 1787.
Salmonella, methodology, use, Rapaport's medium 8111.
Salmonella tubingen identification, feces isolates, food poisoning, man 9921.
Salmonella, use surfactants, antibacterial activity, meat 233.
Shigella flexneri, feces 7251.
Shigella, use, antibiotics 6338.
soil, *Fusarium* 3184.
Staphylococcus saprophyticus, urine 9951.
Streptococcus, fecal microflora 3595.
thienamycin, *Pseudomonas maltophilia*, feces 9066.
Trichoderma, soil, methodology 2711.
use, n-butylbisphosphate carboxylase, proteolytic bacteria, rumen microorganisms, cattle 7243.
Xanthomonas campestris pv. *campestris*, soil 6309.
yeasts, *Antarctica* 3626.
yeasts, brewing 4528.
yeasts, fungi, counting methods, milk products 4530.
yeasts, soil 6348.
yeasts, wild type, brewing 4527.
Yersinia enterocolitica, meat 2049.
Yersinia pestis 1787.
Zymomonas, beer 1992.
Zymomonas mobilis, auxotrophs 1788.

Media (selective),

- Acinetobacter* 5393.
actinomycetes, metabolites, production 4706.
Agrobacterium 7256.
Aspergillus flavus, *Aspergillus parasiticus* 5437.
bacteria, fungi, molds 7212.
bacteria isolation, contagious equine metritis, horses 862.
Bordetella pertussis 9900.
Campylobacter fetus subsp. *jejuni*, food contamination, minced meat 1071.
Capnocytophaga, blood culture, agar 9906.
Clostridium difficile 6319.
Clostridium perfringens, spores 892.
detection, *Mycobacterium* 9933.
doline, *Beauveria bassiana*, *Metarhizium* 3631.
Erwinia stewartii 9053.
Escherichia coli, agar methodology 2702.
+gentamicin, screening, *Micromonospora*, aminoglycoside antibiotics production 6107.
Haemophilus influenzae, respiratory tract isolation 9952.
identification, anastomosis, *Rhizoctonia solani* 9989.
isolation, *Cylindrocium*, *Fusarium*, trees roots, stems 6352.
isolation, *Laetisaria arvalis*, soil 4212.
isolation, soil, *Cochliobolus sativus* 4526.
lincomycin, *Ureaplasma*, *Mycoplasma*, *Acholeplasma* 7233.
Macrophomina phaseolina sclerotia, soil isolates 1815.
+maltese, *Lactobacillus* association *Streptococcus thermophilus*, enumeration 3571.
methodology, *Staphylococcus aureus* detection, association, food contamination 5416.
Mycobacterium 4503.
Mycoplasma hyorhinus, *Mustela vison* lung cells 4491.
novobiocin, *Salmonella* 3596.
panthothenic acid, *Saccharomyces* wild types 3628.
Penicillium viridicatum, cereals food contamination 7269.
Phytophthora cinnamomi, soil 324.
polymyxin B loss, *Vibrio parahaemolyticus*, seafood 222.
Propionibacterium 3598.
Pseudomonas aeruginosa 3615.
Pseudomonas aeruginosa, *Escherichia coli*, norfloxacin antibiotic resistance 2404.
Pseudomonas solanaceae 9898.
Renibacterium salmoninarum, methodology 5427.
Saccharomyces cerevisiae, wine, fermentation 8403.
Salmonella typhimurium, thermal injury recovery 3574.
Staphylococcus 873.
Staphylococcus aureus, cell culture temperature relationship 2661.
Staphylococcus aureus, liquid culture 1801.
Vibrio vulnificus 9948.
Xanthomonas campestris pv. *pruni* 5398.
- Media (transport),**
bacteria, survival 3614.
Campylobacter fetus 2694.
Campylobacter fetus subsp. *jejuni*, isolation, feces, man 9977.
Haemophilus equigenitalis 3591.
urine, effects on bacteria 9909.

Medicago,

nitrogen fixation, *Rhizobium meliloti* 2377.

Medicago littoralis,

crop residues, nitrogen sources, decomposition, soil microorganisms, uptake,

triticum aestivum 7001.

Medicago rugosa,

Helminthosporium carbonum infected, leaves, phytoalexins, isolation,

characterization 1355.

Medicago sativa,

- Acyrtosiphon pisum* pea streak virus transmission, *Pisum sativum* 3908.
alfalfa mosaic virus infection, epidemiology, *Aphididae* vectors 5696.
alfalfa mosaic virus, plant diseases, pathology 2996.
amino acids metabolism, *Corynebacterium insidiosum* wilt 3010.
bacteria infection, effects on, nodulation, yield 2226.
bioassays, phytotoxins, *Corynebacterium insidiosum* 1114.
cell walls cellulose, *Ruminococcus albus* biodegradation 9259.
crown rot, root rot, *Pseudomonas viridiflava* 6744.
crown rot, root rot, *Rhizoctonia solani*, *Fusarium*, pathogenicity, Egypt 5675.
crown rot, USA, Utah 5322.
disease reservoirs, pea streak virus, alfalfa mosaic virus 3929.
disease resistance, anthracnose, *Colletotrichum trifolii* 5046.
disease resistance assays, wilt, *Corynebacterium insidiosum*, *Verticillium albo-atrum* 4063.
disease resistance, infection, bacteria, fungi 7750.
disease resistance, root rot *Phytophthora megasperma* f.sp. *medicaginis* 3913.
disease resistance, wilt, *Fusarium oxysporum* f.sp. *medicaginis*, virulence 3914.
epidemiology, wilt, *Verticillium albo-atrum*, USA, Wyoming 2123.
genotypes, nitrogen levels, nitrogen fixation, *Rhizobium meliloti* 605.
infection, *Cylindrocarpum gracile*, *Fusarium roseum*, relationship sulfur deficiency 7658.
leafspot, *Stemphylium botryosum*, pathogenesis, light, relative humidity effects on 141.
leafspot, surveys, Egypt 5670.
leaves, phytoalexins, interaction, *Verticillium albo-atrum* 2999.
nitrogen fixation, nodulation, *Rhizobium meliloti*, light intensity, carbon dioxide, concentration effects on 9586.
nitrogen fixation, *Rhizobium*, nodules, bacteroids structure 9613.
nitrogen fixation, water stress effects on 4234.
nitrogen-15 distribution, bacteroids, nodules, *Rhizobium*, nitrogen fixation 9615.
nodulation, *Rhizobium meliloti*, auxotrophy mutants, adenine nutrient requirements 9616.
nodulation, *Rhizobium meliloti*, nitrogenase, genes, transcription 3228.
nodulation, *Rhizobium meliloti* strains competition association 7857.
nodulation, *Rhizobium* soils inoculation 5128.
nodules development, *Rhizobium meliloti*, nitrate effects on 3239.
pathogenicity, *Verticillium albo-atrum* strains 1131.
pH, effects on, *Rhizobium meliloti*, nodulation 3238.
photosynthesis carbon sources effects on, nitrogen fixation, *Rhizobium meliloti* 9578.
Phytophthora megasperma f.sp. *glycinea*, pathogenicity, temperature effects on 336.
phytoalexins, polysaccharides, *in vitro* biosynthesis, *Colletotrichum trifolii* 353.
plant breeding, disease resistance, *Verticillium* wilt 7669.
plant diseases, surveys, USA, Wyoming 9330.
races, disease resistance, screening, infection 477.
Rhizobium meliloti inoculation effects on nutrient uptake, soils (saine) 7842.
Rhizobium meliloti nodulation, vesicular-arbuscular mycorrhizas role growth, nutrient uptake, phosphorus fertilizers effects on 6943.
Rhizobium meliloti, transposon 5, mutants, nodules, ultrastructure 7848.
Rhizobium nodulation, association, *Fusarium oxysporum* infection 5114.
root rot, crown rot, *Trematosphaeria circinans*, USA, South Dakota 8532.
root rot, *Myrothecium roudum*, *Myrothecium verrucaria* 9329.
root rot, *Phytophthora megasperma* f.sp. *medicaginis*, USA, Wyoming 3921.
saponins effects on nitrogen cycle, soil microorganisms, peat 2355.
screening, disease resistance, leafspot 6880.
seed treatments, adhesives, inoculation, *Rhizobium meliloti* 8681.
seeds, detection, seed-borne diseases, *Verticillium albo-atrum* 3918.
silage, *Trichoderma viride*, cellulase, role 2931.
symptoms, *Rhizobium meliloti*, acetylene reduction 2374.
Verticillium albo-atrum pathogenicity 9331.
Verticillium albo-atrum wilt, India 4941.
viruses infection 2103.
wilt, disease resistance, inheritance 6862.
wilt, *Fusarium oxysporum* f.sp. *medicaginis*, soil moisture, effects on, disease resistance 4097.
wilt, *Verticillium albo-atrum*, effects on, *Spodoptera eridania*, growth, feeding 4943.
wilt, *Verticillium albo-atrum*, pathogenicity, genetic analysis 3049.
yield reduction, alfalfa mosaic virus infection 2102.
yield, *Rhizobium*, vesicular-arbuscular mycorrhizas, phosphate levels, soil 7850.

Medicago truncatula,

nitrogen fixation, *Rhizobium* 2386.

Medical dressings,

contamination, *Bacillus*, fungi, *Micrococcus*, *Propionibacterium* 8073.

Medical equipment,

- anesthesia, bacteria contamination 7205.
injectable vials, cost-benefit analysis, bacteria contamination 9822.
nosocomial infection, man, reviews 2839.
respirators, nosocomial environments, bacteria contamination 9823.
sterility, hydrogen peroxide, glutaraldehyde, sanitizers 5227.

Medical instruments,

sterilization, paraformaldehyde tablets use 5228.

Medical personnel,

- anesthesia, man, medical equipment, bacteria contamination 7205.
nasopharynx, *Staphylococcus aureus* isolation, antibiotic resistance, antibiotic sensitivity testing 8980.

Medicarpin,

Cicer arietinum, metabolism, *Fusarium solani* 3779.

Medicinal plants,

extracts, antifungal activity, *Drechslera turcica*, leaf blight, *Zea mays* 7756.

leafspot, phytopathogenic fungi 7686.

Medicine,

bacteria contamination 4464.

Medinotrabesate,

+propham, effects on soil microorganisms, nitrogen cycle, cellulose decomposition 7012.

inhibition, soil microorganisms growth 3249.

Megacin A,

Bacillus megaterium, comparison, bacteriocins 8044.

Megamodulin,

Escherichia coli, purification, characterization 7301.

purification, characterization, *Saccharomyces cerevisiae* 5477.

Megaselia halterata, oviposition attractants, chemical composition, *Agaricus bisporus* 6661.

Megasphaera elsdenii, butyryl-CoA dehydrogenase, purification, characterization 8224, flavodoxin, riboflavin 5'-phosphate mobility, N.M.R. 7302, propachlor metabolism, 2-mercapto-N-isopropylacetanilide production 8385 substrate analogs inactivation butyryl-CoA dehydrogenase 1887.

Melampsora larici-populina, growth, benzimidazole effects on, leaves culture, *Populus* 6880.

Melampsora lini, rust, histology, ultrastructure, leaves, *Linum usitatissimum* 9401.

Melampsora medusae, infection, *Populus deltoides*, isolates temperature tolerance 2206.

leaf rust, photoperiod, effects on, pathogenesis, *populus* 6930, leaf rust, *Populus deltoides*, *Populus euramericana*, temperature, role, disease resistance 6911.

races, sensitivity, light intensity, temperature, infection, *Populus deltoides* 6917.

rust, *Populus*, epidemiology, Canada 4170.

Melanconis flavovirens, antibiotics production, inoculum levels, liquid culture 8022.

Melanin, decomposition, soil microorganisms 1476.

production, *Streptomyces cattleya*, balance studies 7997.

chemical composition, *Coprinus*, role humus formation, soil 9218, deficient mutant, complementation genetic analysis, gene mapping, association

Gossypium wilt, *Verticillium dahliae* 6796.

fungi, degradation, soil microorganisms, soils (sodic) 2335.

Phellinus weirii, role wood decay 6933.

Melanoidin, coloration removal, use, *Coriolus* enzymes 150.

Melanose, Daporphne citri, *Citrus latifolia*, epidemiology, USA, Florida 9376.

Meloidius alba, tobacco streak virus infection, host specificity, pathogenesis, disease transmission 1126.

Meloidogyne incognita, disease resistance, association potato virus Y infection, *Nicotiana tabacum* 9430.

disease resistance, relationship, potato virus Y infection, *Nicotiana tabacum* 9432.

effects on pathology, *Cylindrocycladium rotalariae* root rot, *Glycine* max 3909.

infection, effects on, lycopersicon esculentum, susceptibility, *Fusarium oxysporum* f.sp.lycopersici 1281.

infection, *Impatiens*, amino acids, \pm *Plasmopara obducens* infection 2205.

interaction, *Fusarium oxysporum* f.sp.lycopersici, effects on, *Lycopersicon esculentum*, growth factors, production 1276.

+ *Rhizoctonia bataticola*, mixed infection, plants, effects on growth 4992.

Meloidogyne incognita acrita, infection, + *Fusarium oxysporum* f.sp.vasinfestum wilt, disease resistance, *Gossypium hirsutum* 7732.

Meloidogyne javanica, interaction *Fusarium oxysporum* f.sp.lycopersici, wilt, *Lycopersicon esculentum* 3990.

Membrane filtration, coliforms, enumeration agar 3568.

counting methods, coliforms, indicator species 2671.

drinking water coliforms, enumeration efficiency 3587.

drinking water, rotavirus (simian) concentration 3538.

enumeration equipment, bacteria, food contamination 3575.

+ fluorescence, counting methods, bacteria 1798.

fluorescence, counting methods, fungi, bacteria, food contamination 176.

gentamicin binding filters, enzymes inactivation 5258.

+ hydrophobic grid, use, colonies counting methods 8138.

isolation, mRNA, SV40 transformed cells 829.

microorganisms enumeration 3512.

wastewater treatment, fouling organisms, bacteria, films characterization 3465.

Membrane fusion, protoplasts, actinomycetes, recombination, technology 5422.

Membrane permeability, antibiotic L-840,876 antibacterial activity mechanisms 4409.

association, antibiotic resistance, *Mycobacterium intracellulare* 7047.

association, bacteria fatty acid composition 8895.

clofocet, effects on, *Bacillus subtilis* 6053.

Escherichia coli, porins, role antibiotic resistance, β -lactam antibiotics 1542.

functional activity, copiamycin, synergism, imidazole 9679.

microorganisms, haloalkylmalonic esters, alkyl phenoxypolypropandioles, 2-methyl-5-alkyl-5-phenoxy-1,3-dioxane, effects on 7957.

outer membranes, association, *Pseudomonas aeruginosa*, polymyxin antibiotic resistance 632.

Membrane potential, Paracoccus denitrificans, analysis, electrodes construction methodology 8124.

relationship, ATP, *Gossypium hirsutum*, cytolydones, blight, *Xanthomonas campestris* pv.malvaceorum 3055.

Solanum tuberosum, *Phytophthora infestans* cell walls extracts effects on 3053.

Membrane proteins, *Aeromonas salmonicida*, cell surface, purification, physicochemical properties 7200.

characterization, taxonomic significance, *Xanthomonas campestris* pv.campestris 5471.

fractionation, *Halobacterium halobium* 2739.

Hordeum vulgare, phytoalexins binding, *Rhynchosporium secalis*, scald 9346.

Pseudomonas aeruginosa, envelopes, antibiotic resistance, polymyxin 2414.

Membrane structure, mitochondria, demosan, antifungal activity 1416.

Membrane vesicles, NADH dehydrogenase, purification, characterization, *Bacillus subtilis* 966.

Neisseria gonorrhoeae, purification, affinity chromatography 835.

Membranes, cellulose acetate, isoelectric focusing methodology, bacteria β -lactamase 9038.

dialysis, interspecific relationships, fungi, methodology 2715.

Escherichia coli, mannans biosynthesis 110.

inorganic compounds, bacteria ultrafiltration, milk 4782.

lipids, microorganisms, relationship soil sediments 5104.

Membranes, (continued)

Micrococcus luteus, menaquinones, carotenoids biosynthesis 2839.

reverse osmosis, cellulose acetate, biodegradation, bacteria, fungi 2883.

ribosomes, *Bacillus licheniformis*, biosynthesis, α -amylase.

α -D-glucosidase 8295.

Saccharomyces, fatty acids, role, ethanol production 6633.

ultrafiltration, bacteria, hygiene, milk products 4791.

Membranosoma heterantherae, infection, cytopathology, *Heteranthera dubia* 9428.

Menaquinone, biosynthesis, bacteria, precursors, enzymes, genetic control, reviews 6628.

Streptomyces albus, structure, spectroscopy, taxonomy 5552.

Menaquinones, biosynthesis, *Micrococcus luteus* membranes 2839.

Mengovirus, interferon antiviral activity, L cells 7103.

Meningitis, diagnosis, counter immunoelectrophoresis, man 6316.

diagnosis, latex agglutination 9957.

diagnosis, latex agglutination, *Neisseria meningitidis*, *Haemophilus influenzae*, man 3597.

treatment, man, relationship *Streptococcus pneumoniae* antibiotic sensitivity testing 8817.

Mental retardation, children, oral hygiene association, dental canes, Finland 8079.

Mentha, rust, *Puccinia menthae* infection, pathogenicity, host specificity 431.

Mentha arvensis, essential oils, antifungal activity, *Fusarium lateritium* f.sp.cajani 6062.

Mentha arvensis var.piperascens, essential oils antifungal activity, *Helminthosporium oryzae* 6876.

Mentha piperata, extracts, antifungal activity, *Aspergillus niger*, *Penicillium chrysogenum* 2479.

2-Mercapto-N-isopropylacetanilide, production, intestinal microflora, propachlor metabolism 8385.

2-Mercaptobenzenmethanethiol, diesters, antifungal activity 3340.

Mercenaria campechiensis, contamination, *Escherichia coli*, relationship, *Salmonella* 2042.

seafish, storage effects on bacteria 4765.

Mercenaria mercenaria, depuration, persistence, *Vibrio harveyi*, *Vibrio parahaemolyticus*, *Escherichia coli* 2052.

poliovirus bioaccumulation, polluted environments 1711.

Mercuric oxide, disease control, white rot, *Conolus versicolor*, pruning wounds, *Malus pumila* 6873.

Mercuric reductase, *Pseudomonas aeruginosa*, active sites, N-terminus, amino acid sequence, homology glutathione reductase (NAD(P)H), dihydrodipicamide dehydrogenase 9175.

Yersinia enterocolitica, characterization, mercury resistance 8727.

Mercury, aquatic environment, chemical speciation 1516.

Bacteroides susceptibility 681.

drug resistance, hospitals, clinical isolates, *Escherichia coli*, *Staphylococcus aureus* 662.

resistance freeze-thawing, effects on plasmids *Pseudomonas aeruginosa* 3265.

resistance, mercuric reductase, characterization, *Yersinia enterocolitica* 8727.

resistance, R factors, *Staphylococcus aureus* 2403.

Meria coniospora, conidia germination, fixation, potassium permanganate use 4519.

Meria laticia, Larix defoliation, association *Adelges* grazing 540.

Meristem tip culture, carnation mottle virus, enzyme-linked immunosorbent assay detection, *Dianthus caryophyllus* 7223.

elimination, plum pox virus, *Prunus domestica* 2246.

elimination, viruses infection, association, regeneration 469.

nepovirus, elimination, *Vitis vinifera* 3134.

use, *Solanum tuberosum*, infection, potato virus X, potato virus Y 2155.

viruses elimination, *Allium sativum* 1385.

viruses elimination, *Fraxino* 2243.

Merremia pacifica, witches' broom, mycoplasma-like organisms, disease transmission, *Orosius lotophagorum* ryukyensis 9424.

Mesodiplogaster, grazing, effects on *Pseudomonas capacia* nitrogen mineralization 614.

Mesophilic bacteria, comparison, *Clostridium thermocellum*, sugar production, cellulose biodegradation 9251.

enumeration, beef carcasses, chilling effects on 8476.

methanogenesis, pigs manure 4262.

starter cultures, Cheddar cheese 3620.

Mesophilic fungi, colonization, straw, triticum, *Vicia faba*, composting 3781.

Mesophilic microorganisms, biodegradation, crop residues, *Oryza sativa* 168.

Mesophyll, leaves, *Citrus sinensis*, *Citrus limonia*, disease resistance, *Xanthomonas campestris* 456.

Nicotiana tabacum leaves, hypersensitive response, *Pseudomonas pisii* infection 462.

Metabolism, acids, clinical isolates, levels, use, diagnosis, anaerobic bacteria infection 89.

carbohydrates, pathways, tri-carboxylic acid cycle, bacteria, enzymes 123.

fatty acids, *Mycobacterium*, measuring techniques, radiometry 837.

nucleic acids, *Solanum tuberosum*, potato virus X infection effects on 2187.

soil properties, humus, pollution, effects on, lead 2326.

sugars, glucokinase, fructokinase, characterization, *Zymomonas mobilis* 105.

thiophene-2-carboxylate, phototrophic bacteria 152.

Metals, accumulation, tubers, antifungal activity, *Phytophthora infestans*, *Solanum tuberosum* 9495.

analogs, chemical control, *Phytophthora infestans*, *Solanum tuberosum* 2288.

antibacterial activity 8633.

Metalaxyl, (continued)

- antifungal activity, Pythium, Phytophthora 481.
 +chlorothalonil, +ethylene bisdithiocarbamate, Spinacea oleracea disease control
 white rust, blue mold 5064.
 disease control, Bremia lactucae, downy mildew, Lactuca sativa 5837.
 disease control, Helianthus annuus downy mildew 1418.
 disease control, Peronospora parasitica, downy mildew, Brassica pekinensis 8631.
 disease control, Phytophthora cinnamomi, root rot, Abies fraseri 5867.
 disease control, Phytophthora citrophthora, brown rot, fruits 1419.
 disease control, Phytophthora infestans blight, Solanum tuberosum 9494.
 disease control, Phytophthora parasitica root rot, Citrus paradisi 5065.
 disease control, Pseudoperonospora humuli, downy mildew, Humulus lupulus 1403.
 disease control, Pythium blight, Phaseolus vulgaris 9493.
 effects on Nicotiana tabacum microflora 496.
 effects on pathology, Phytophthora cactorum collar rot, Mula pumila 505.
 +mancozeb, prophylaxis, treatment, Phytophthora palmivora infection, orchards 5828.
 +nematicides, disease control, black shank, Nicotiana tabacum 4125.
 Peronospora hyoscyami, infection, Nicotiana tabacum, susceptibility 4126.
 +phytoalexins, Glycine max root rot treatment, Phytophthora megasperma f.sp. glycinea 503.
 Phytophthora megasperma drug resistance 1529.
 resistance, Peronospora hyoscyami, blue mold, disease control, Nicotiana tabacum 5063.
 resistance, Phytophthora infestans, association Solanum tuberosum infection, Netherlands 6795.
 resistance Phytophthora infestans, incidence, infectivity, Solanum tuberosum, Israel 6798.
 root rot, stalk rot, Phytophthora megasperma f.sp. glycinea, Glycine max 1420.
 seed treatments, disease control, downy mildew, Oryza sativa 1433.
 seed treatments, effects on nitrogen fixation, disease control, Phytophthora megasperma f.sp. glycinea, Glycine max 8644.
 seed treatments, Penicillium amaranum, disease control, Sclerospora graminicola downy mildew 9502.
 sensitivity, Phytophthora infestans infection, Solanum tuberosum 504.
 treatment, blue mold, Peronospora hyoscyami, Nicotiana tabacum 2287.
 treatment, Phytophthora palmivora canker, Theobroma cocoa, disease control 1417.
 treatment, pythium infection, Gramineae 4114.
 use, ornamental plants disease control 5056.

Metallo-proteinase inhibitor,
 purification, characterization, Streptomyces rishiniensis, Aspergillus oryzae 2735.

Metalloproteinase inhibitor,
 Streptomyces rishiniensis, purification, characterization 3692.

- Metals,**
 binding, Bacillus subtilis, conversion 4257.
 cations, effects on pectic esterase production, Verticillium albo-atrum, Verticillium dahliae 7313.
 dietary intake, animals, aflatoxins interaction 4900.
 fouling organisms, antifungal activity, antifouling substances, sea water 151.
 inhibition 4-hydroxybenzoate 3-monoxygenase, Pseudomonas fluorescens 8275.
 ions, resistance, bacteria, association, plasmids, reviews 8735.
 nutrient availability, chelates, sewage sludge, digestion (anaerobic) 8947.
 nutrient requirements, sewage sludge, digestion (anaerobic) 8946.
 role, Escherichia coli, alkaline phosphatase, substrate association, formamide effects on 2770.
 tolerance, bacteria, association, soil pollution 6980.
 uptake, bacteria, wastewater treatment 5313.

Metarhizium,
 media (selective), dione 3631.

- Metarhizium anisopliae,**
 biological control, Culex quinquefasciatus 2836.
 biological control, eggs, larvae, Otiorhynchus sulcatus 986.
 biological control, Nasutitermes exitiosus, pathogens, pest control 7502.
 biological control, pathogenicity, animals 4711.
 conidia, viability, storage conditions, effects on, virulence, Culex pipiens 7480.
 growth, liquid culture, nutrient sources, carbohydrates 4535.
 pathogens, biological control, Nasutitermes exitiosus 1966.
 peptides antibiotic K-582, amino acid sequence 7169.

Metarhizium anisopliae,
 conidia, viability, characterization, biological control, Culex pipiens 7479.
 conidia, viability, temperature, relative humidity, effects on, virulence, culex pipiens, Anopheles stephensi 7478.
 media (culture) 8151.

Meteorology,
 relationship, epidemiology, blast, Pyricularia oryzae, Oryza sativa 1182.
 sensors, plant diseases epidemiology, aspiration systems 8530.

Metham,
 fumigation, disease control, Glycine max 5060.
 fumigation, inhibition nitrogen fixation, nodulation, Glycine max 3251.

Metham sodium,
 disease control, Arachis hypogaea, Pythium myriophyllum pod rot, Verticillium wilt 1411.

Methamidophos,
 disease control, Nephrotettix virescens, vectors, rice tungro virus 6847.

- Methanobacterium,**
 biosynthesis, bacteria, sewage treatment reactors 4435.
 biosynthesis, yeasts, cellulose metabolism 7510.
 effects on methanogenesis, methanogenic bacteria 3259.
 extraction, coal seams, use, culture, growth, methylothrophic bacteria 7870.
 formation, Methanobacillus kuznetsovii, benzylpenicillin effects on 2551.
 gas production, microorganisms, animal wastes fermentation, antibiotics effects on 1039.
 gas production, soil microorganisms, soil moisture, nitrate effects on, anaerobic conditions 9567.
 hydrogen, fermentation, straw + food wastes substrates 5995.
 oxidation, bacteria, coal mines 4265.
 oxidation, methylothrophic bacteria, metabolism enzymes 7871.
 oxidation, Nitrosococcus oceanus, Nitrosomonas europaea 4267.
 production, anaerobic bacteria, cattle feces fermentation 538.
 production, cellulose conversion, fermenters, cellulolytic bacteria 8441.
 production, straw + manure mixtures 9630.
 production, thermophilic bacteria, isolation, growth, morphology 2386.
 reactors, mathematical models, digestion (anaerobic), bacteria 5308.

Methanethiol,
 cheese flavor, ripening, Cheddar cheese 9272.
Methanobacillus kuznetsovii,
 benzylpenicillin effects on methane formation 2551.

Methanobacterium,
 desulfurobium, biodegradation, polyethylene glycol, ethylene glycol 8430.

Methanobacterium formicicum,
 biosynthesis, superoxides anions, formalate radicals 3734.
 ribosomes protein biosynthesis, antibiotic sensitivity testing 2423.

Methanobacterium thermoautotrophicum,
 acetyl CoA biosynthesis, carbon dioxide role 7414.
 carboxy-5,6,7,8-tetrahydromethanopterin structure relationship, methanopterin 4577.

coenzyme F430 containing proteins, purification, characterization 2737.
 environments isolates, high-performance liquid chromatography phospholipids assays 5382.
 methanopterin structure 4576.

Methanococcus marisnigellus,
 media (culture), agar, growth conditions, methodology 9050.

Methanococcus vannielii,
 ribosomes protein biosynthesis, antibiotic sensitivity testing 2423.

Methanococcus voltae,
 media (culture), agar, growth conditions, methodology 9050.

Methanogenesis,
 Archaeobacteria 7017.

- bacteria, dehalogenation, haloaliphatic organic compounds 5290.
 2-bromoethanesulfonic acid, 2-chloroethanesulfonic acid, inhibition, acetic acid, metabolism, methanogenic bacteria 5136.
 choline, Desulfobrio, interaction, Methanosarcina barkeri 3261.
 digestion (anaerobic), activated sludge solid wastes 1692.
 digestion (anaerobic), apples 4442.
 digestion (anaerobic), crop residues, inoculation, enumeration 7197.
 digestion (anaerobic), films, wastewater treatment 8957.
 digestion (anaerobic), industrial wastes, microorganisms, reviews 7196.
 digestion (anaerobic), industrial wastes, tanning 8964.
 digestion (anaerobic), silage effluents 8963.
 digestion (anaerobic), use carbon sources, Spirulina maxima 625.
 kinetics, digestion (anaerobic), agricultural wastes 9798.
 lakes sediments, bacteria, factors affecting 624.
 landfills, waste disposal 4263.
 mesophilic bacteria, pigs manure 4262.

methanogenic bacteria, cellulose, anaerobic digestion 3258.
 methanogenic bacteria, methane effects on 9253.
 oxygen effects on, digestion (anaerobic), comparison, rumen, spectrometry 9629.
 oxygen inhibition, digestion (anaerobic), rumen, in vitro 8058.
 phenol, bacteria, contamination, aquifers 4450.
 reactors methodology, fermentation 8716.
 sewage sludge, digestion (anaerobic) 8934.
 temperature, carbon dioxide, atmospheric conditions, effects on, methanogenic bacteria 8715.

Methanogenic bacteria,
 acetic acid, metabolism, 2-bromoethanesulfonic acid, 2-chloroethanesulfonic acid, inhibition, methanogenesis 5136.
 cell culture methodology, anaerobic conditions 3549.
 cellulose anaerobic digestion, methanogenesis 3258.
 coenzyme F420 assays, high-performance liquid chromatography, fluorescence, sewage sludge 9021.
 high-performance liquid chromatography phospholipids assays, environments isolates 5382.
 isolation, oil fields, USSR, characterization 3260.

metabolism, sewage treatment, technology, books 5450.
 methanogenesis, digestion (anaerobic), use carbon sources, Spirulina maxima 625.
 methanogenesis, kinetics, digestion (anaerobic), agricultural wastes 9798.
 methanogenesis, methane effects on 3259.
 methanogenesis, oxygen inhibition, digestion (anaerobic), rumen, in vitro 8058.
 methanogenesis, sewage sludge, digestion (anaerobic) 8934.
 methanogenesis, temperature, carbon dioxide, atmospheric conditions, effects on 8715.
 mixed culture, biodegradation, propionate, pathway 4748.
 ribosomes protein biosynthesis, antibiotic sensitivity testing 2423.

Methanol,
 concentration, Kloeckera growth, carbon limitations, assimilation enzymes biosynthesis 6552.
 conversion, Butylobacterium methylothrophicum 9216.
 metabolism, energetics, Pichia pastoris 7546.
 metabolism, Pseudomonas fermenters 6318.
 +organic compounds loading, anaerobic conditions, bioreactors, degradation association 8940.

solubility, Yersinia enterocolitica enterotoxins 7633.
 Streptomyces species, effects on NADP⁺ nucleosidase biosynthesis 2797.
 substrates, Methylomonas clara, single-cell protein production 3659.
 utilization, Hyphomicrobium, polysaccharides biosynthesis 3709.
 utilization, single-cell protein biosynthesis, Pichia pastoris isolation, characterization 5466.

Methanopterin,
 relationship carboxy-5,6,7,8-tetrahydromethanopterin structure, Methanobacterium thermoautotrophicum 4577.
 structure, Methanobacterium thermoautotrophicum 4576.

Methanosarcina barkeri,
 coenzyme F430 containing proteins, purification, characterization 2737.
 ferredoxin purification, characterization 2741.

interaction, Desulfobrio, methanogenesis, choline 3261.
 ribosomes protein biosynthesis, antibiotic sensitivity testing 2423.

Methanospirillum hungatei,
 dicyclohexylcarbodiimide sensitivity 3303.

Methicillin,
 antibacterial activity, diptheroids 7977.
 antibacterial activity, Staphylococcus, clinical isolates 8804.
 antibacterial activity, Streptococcus group B 3409.
 antibiotic resistance, fatty acid composition, Staphylococcus aureus, Staphylococcus epidermidis 8723.
 antibiotic resistance, phospholipid composition, Staphylococcus aureus 9648.
 antibiotic resistance, plasmids, Staphylococcus aureus 6019.
 antibiotic resistance, protein composition, Staphylococcus 655.
 antibiotic resistance, protein composition, Staphylococcus 2407.
 antibiotic resistance, Staphylococcus aureus 3267.

Methicillin, (continued)

- antibiotic resistance, *Staphylococcus aureus* 5160.
- antibiotic resistance, *Staphylococcus aureus* 8740.
- antibiotic resistance, *Staphylococcus aureus*, Eire hospitals isolates, plasmids role 7032.
- antibiotic resistance, *Staphylococcus aureus*, nosocomial environments 3301.
- antibiotic resistance, *Staphylococcus aureus*, septa, peptidoglycans, biosynthesis, role 5148.
- antibiotic tolerance, *Staphylococcus aureus* 5250.
- resistance, *Staphylococcus aureus* antibiotic sensitivity testing methodology 4381.
- resistance, susceptibility strains, *Staphylococcus aureus*, addicts isolate, antibiotic sensitivity testing 3393.
- sensitivity, *Staphylococcus aureus*, cloxacillin disc-diffusion test 639.
- sensitivity, *Staphylococcus epidermidis* 8828.
- Staphylococcus aureus*, antibiotic resistance 3403.
- Yersinia pestis* antibiotic sensitivity testing 6110.

Methionine,

- analogs, resistant mutant, *Cephalosporium acremonium*, cephalosporin C biosynthesis 4338.
- biosynthesis, *Bacillus*, antibiotic Ro 22-5417 inhibition 6201.
- biosynthesis, *Escherichia coli*, mutation effects on genes regulation 7481.
- derivatives, effects on *Aspergillus ochraceus* ochratoxin biosynthesis 7628.
- methionyl-tRNA synthetase activation, structure-activity relationships, *Escherichia coli* 4597.

- L-Methionine γ -lyase,** production, gram-negative bacteria, culture systems 5389

Methionine sulfoxide,

- detection, cell surface, *Staphylococcus aureus* 1834.

Methionyl-tRNA synthetase,

- aminoacylation activity, zinc removal inhibition, *Escherichia coli* 953.
- methionine activation, structure-activity relationships, *Escherichia coli* 4597.

Methisazone,

- injection, disease control, apple mosaic virus, *Malus pumila* 9500.

Methisoprinol,

- antiviral activity, rabies virus, BHK-21 cells 7100.

Methodology,

- afatoxins detection, urine, man 1100.
- agar, media (selective), *Escherichia coli* 2702.
- antibiotic sensitivity testing, anaerobic bacteria 1602.
- antibiotic sensitivity testing, anaerobic microorganisms 1593.
- antibiotic sensitivity testing, animal isolates 2504.
- assays, proteolytic bacteria, soil, sludge 850.
- bacteria trapping, fibrin polymerization 2698.
- blood culture, bacteremia diagnosis, man 860.
- candidiasis incidence, man, Nigeria 1812.
- central microflora, man, quantitation, sampling 883.
- characterization, brewing yeasts, ethanol fermentation 1049.
- collection, sediments, detection, viruses, marine environment 2655.
- comparison, antigens localization, *Pasteurella haemolytica*, cryopreservation 849.
- comparison assays psychrotrophic bacteria, milk 1073.
- concentration, phages, isolation, waste water 2654.
- contamination analysis, association, bacteria culture, freeze-drying 2684.
- culture, *Salmonella* isolation, animals food contamination 1088.
- culture, *Streptococcus* group A, anaerobic conditions, infection diagnosis, man 2696.
- detection, phomopsis leptostromiformis, infection, *Lupinus angustifolius*, seeds 1811.
- detection, *Salmonella* food contamination, chickens carcasses 1077.
- detection, *Shigella* aminopeptidase 871.
- diagnosis, leptospirosis, man, animals 2662.
- diagnosis, salmonellosis, X radiation probes, antibodies labelling 1799.
- disease control, maize streak virus infection, Zea mays 461.
- disinfection, waste water, microbiology, bibliographies 1698.
- enumeration analysis, bacteria 2677.
- enumeration, *Campylobacter fetus* subsp./jejuni, aquatic environment 2676.
- enumeration, gram-negative bacteria, cosmetics 2679.
- enumeration, microorganisms, association, substrates uptake, aquatic environment 818.
- enzyme-linked immunosorbent assay, detection, antibodies, togavirus 1746.
- Escherichia coli* detection, aquatic environment 2667.
- extraction, *Clostridium* perfringens, spores, sediments 1771.
- fluorescent antibody test, detection, antigens, rinderpest virus, diagnosis, cattle 830.
- foliar applications, biological control, pathogens, *Arthropoda* 991.
- β -D-galactosidase p-lickation, *Saccharomyces ananensis* immobilization 901.
- herpes simplex virus typing, drug sensitivity testing association thymidine kinase activity 1741.
- high-performance liquid chromatography, *Agaricus bisporus* agaritine isolation 2712.
- high-performance liquid chromatography, cell-free system, *Streptomyces clavuligerus* 1787.
- identification, fermentation gram-negative cocci 2707.
- identification, *Fishes* pathogens, *Vibrio*, *Pasteurella* 1785.
- identification, polymyxin B, reaction, lipopolysaccharides, cell walls, bacteria 1790.
- identification, use, monoclonal antibodies, nuclear polyhedrosis virus 2652.
- immuno-fluorescence, use, antibiotic sensitivity testing, bacteria 1605.
- inoculation, *Erwinia chrysanthemi*, ornamental plants, greenhouses 2229.
- inoculation, experimental infection, sheath rot, *Sarocladium oryzae*, *Oryza sativa* 1188.
- inoculum, effects on *Rhizobium*+*Leguminosae* seeds survival 1510.
- insertion, nucleotides, yeasts, mutants 1808.
- isolation, culture, pathogens, *Entomophthorales*, *Insecta* 1783.
- isolation, fungi 902.
- isolation, glucose isomerase, mycelia, *Streptomyces albobiosus* 18.
- isolation, phages, water, reviews 2649.
- isolation, *Phytophthora megasperma* f.sp.glycinea, association, *Pythium* contamination 589.
- isolation, separation, *Aspergillus terreus* territerrum 286.
- isolation, soil microorganisms, dry separation 1734.
- media, association, *Aspergillus flavus* aflatoxins production 1101.
- media (culture), nutrient requirements, *Ecdionia parasitica* 1814.
- media (isolation), *Trichoderma*, soil 2711.
- media, 5-fluorocytosine drug sensitivity testing, *Candida*, *Torulopsis* 897.
- microorganisms coatings, scanning electron microscopy 1735.

Methodology, (continued)

- mutagenicity testing, Ames test 845.
 - Mycobacterium smegmatis*, mycobactin production 117.
 - Mycobacterium smegmatis*, spheroplasts, isolation 856.
 - Neisseria gonorrhoeae*, identification 872.
 - noncooking, association, alcohols fermentation, use, grain 1045.
 - Physalis angulata lesions, use, detection, potato virus A mixed infection 2157.
 - precipitation, monoclonal antibodies, molecular weight, antigenic determinants, glycoproteins, *Rauscher leukemia virus* 1748.
 - Pseudomonas* pulda protoplasts formation 2701.
 - radioactive labelling, viruses proteins 1761.
 - reactors, factors affecting, growth, thermus, *Bacillus* 1794.
 - rearing, *Heliothis armigera confertus*, nuclear polyhedrosis virus, granulosis virus 1738.
 - recovery, poliovirus, adenovirus, contamination, crops, leaves 1767.
 - sampling, bacteria contamination, carcasses 2028.
 - sampling, feces, pathogens, man 2708.
 - screening, antitumor antibiotics, detection, *Actinomyces* 2581.
 - screening, identification, characterization, fungi antitoxins 898.
 - sensitivity, detection, *Mycoplasma*, cell culture 1770.
 - solubilization, yeasts, β -D-galactosidase release 103.
 - species diversity measurements, bacteria cell culture, sampling, statistical analysis 870.
 - staining, localization, hepatitis B surface antigen, liver, man 827.
 - Staphylococcus aureus* identification, fibrinogen hemagglutination use 844.
 - statistical analysis, antimicrobial agents susceptibility, *Escherichia coli* 1795.
 - swabs culture, *Mycobacterium tuberculosis* 869.
 - tissue culture, detection, *Mycoplasma hyorhinis* 2690.
 - treatment, industrial effluents, food industry, reviews 792.
 - vesicular stomatitis virus purification, association Ehrlich ascites tumor cells 1752.
 - video cassette recorder use, bacteria electrophoretic mobility assays 2692.
 - violation bioassays, *Deuteromycetes*, *Insecta* 1002.
 - waste treatment, removal, bacteria, pollution indicators 2610.
 - water purification, microorganisms 1714.
- Methotrexate,**
- analogs, interaction tetrahydrofolate dehydrogenase, fluorescence, *Lactobacillus casei* 2801.
- 7-Methoxy-3-deacetylcephalosporin C,**
- isolation, *Streptomyces*, characterization 7990.
- 3-Methoxy-2,5-toluquinone**
- Aspergillus*, biosynthesis, antibacterial activity 1643.
- 3-Methoxy-4-methyl-5-prop-1-enylfuran-2(5H)-one,**
- metabolites, *Hypoxylon* serpens, spectroscopy 7497.
- N-Methoxycephalosporins,**
- synthesis 5245.
- 7-Methoxycephalosporins,**
- synthesis 5246.
- Methoxyethylene,**
- + benzethonium chloride + maleic acid, antibacterial activity, in vivo, in vitro 6041.
- 6-Methoxymyelin,**
- antifungal activity, *Cladosporium cladosporioides*, wound healing, *Daucus carota* 4078.
 - Daucus carota* roots phytoalexins, antimicrobial activity, bacteria, fungi 5057.
- 4-(4-Methoxyphenoxy)buta-1,2-diene,**
- Hypoxylon chesleri* 2851.
- 3-O-Methyl adenosine,**
- inhibition, vaccinia virus, RNA biosynthesis 3360.
- Methyl benzimidazol-2-yl carbamate,**
- drug resistance, *Botrytis cinerea* 1527.
- Methyl biphenyl,**
- oil, bacteria biodegradation, marine environment 8719.
- Methyl bromide,**
- + virus, toxicity, scleritis, *Sclerotium rolfsii*, *Verticillium albo-atrum*, relative humidity effects on 499.
 - disease control, big vein disease, lettuce big vein virus, *Lactuca sativa* 6889.
 - fumigation, association, plants + endomycorrhizas symbiosis, growth relationship, field trials 5910.
 - fumigation, induction plants stunt, endomycorrhizas role growth 5913.
 - Pinus*, leaf litter, effects on soil microorganisms 3250.
 - soil fumigation, effects on mycorrhizas, *Vitis vinifera*, relationship, stunt 5987.
- 3-O-Methyl cyclopolic acid,**
- antimicrobial activity, *Aspergillus duncaulis* 8877.
- 3-O-Methyl guanosine,**
- inhibition, vaccinia virus, RNA biosynthesis 3360.
- Methyl hydroxybenzoate,**
- inhibition, trimethylamine-N-oxide reductase, *Escherichia coli* 269.
 - = monolaurin, antiviral activity 700.
- Methyl isothiocyanate,**
- + 1,2-dichloropropane, + 1,3-dichloropropane, soil fumigation, *Fusarium oxysporum* isolates invasion 589.
- N-Methyl-N-nitro-N-nitrosoguanidine,**
- induction, mutation, *Streptomyces bikiniensis*, effects on streptomycin biosynthesis, antibiotic resistance 5256.
- N-Methyl-N-formyl hydrazine,**
- glyoxylate metabolites, *Glyoxylate* esculenta, mutagenicity, Ames test 6708.
- 2-Methyl-4-chloro-5-phenoxy-1,3-dioxane,**
- induction *Kluyveromyces fragilis* β -D-galactosidase biosynthesis 6556.
- 3-Methyl-1-butanol,**
- biosynthesis, leucine conversion, *Saccharomyces cerevisiae*, valine effects on, nutrient requirements 3724.
- N-Methyl-2-pyrrolidone,**
- biodegradation, bacteria sewage 2017.
- 1-Methyl-3-allyl-1H-1,4-naphthoquinone,**
- Streptomyces albus*, isolation, characterization 1981.
- 2-(2-Methyl-4-chlorophenoxy)propionic acid,**
- effects on, *Poa pratensis* sugars, amino acids, *Drechslera sorokiniana* pathogenesis 5718.
- 2-Methyl-4-chlorophenoxybutyric acid,**
- soil microorganisms respiration, effect on 5974.
- 2-Methyl-5-alkyl-5-phenoxy-1,3-dioxane,**
- effects on, microorganisms, membrane permeability, enzymatic activity 7957.
- 2'-O-Methyladenosine,**
- drug resistance, vaccinia virus, mutants 8739.

- Methylalkenones**,
reduction, *Beauveria sulfurescens* 130.
- 5-Methylamino-2-deoxyuridine**,
analogs, antiviral activity, herpes simplex virus 1, herpes simplex virus 2 5214.
- 2-(N-Methylamino)-3H-phenoxazin-3-one-8-carboxylic acid**,
Actinomycetes biosynthesis, structure 8337.
- Methylammonium**,
formyltetrahydrofolate synthetase interaction, N.M.R., *Clostridium cylindrosporium* 2853.
- Methylation**,
mRNA, S-adenosylhomocysteine, analogs, effects on, vaccinia virus 3349
- Methylcrotonyl-CoA carboxylase**,
purification, characterization, *Achromobacter* 8233.
purification, characterization, *Pseudomonas citronellolis* 8234.
- Methylene blue**,
use, detection, microorganisms, children blood culture 8140.
- Methylene-bis-thiocyanate**,
disease control, stain, wood, *Pinus* 5882.
- Methylenomycin A**,
biosynthesis, *Streptomyces violaceus-ruber*, role, plasmid pSV1 763.
- 3-Methylfurfurylidene-2-thioxo-4-thiazolidones**,
antimicrobial activity 7960.
- 2-(6-Methylheptan-3-yl)-3-hydroxymethyl-4-butanolide**,
induction streptomycin biosynthesis, *Streptomyces griseus* 5255.
- Methylketone**,
production, association, alcohols, *Nocardia paraffinica*, *Brevibacterium*,
Pseudomonas fluorescens 7460.
- c-N-Methyllysine**,
levels, flagellin, *Proteus morgani* 5476.
- Methylmalonyl-CoA decarboxylase**,
yeast-like alkaliscenes, purification, characterization, cell membranes 7347.
- Methylmercury**,
biodegradation, *Escherichia coli*, *Pseudomonas fluorescens* 1996.
- Methylococcus**,
extracellular polymers, polysaccharides, biosynthesis 9189.
- Methylococcus capsulatus**,
glutamine synthetase, purification, physicochemical properties 6400.
3-hexulose-5-phosphate synthase, purification, characterization 6444.
6-phospho-3-ketohexulose isomerase, purification, characterization 4654.
- Methylomonas**,
3-hexulose-5-phosphate synthase, purification, characterization 6445.
- Methylomonas clara**,
single-cell protein production, methanol substrates 3659.
- Methylophilus methylotrophus**,
amine dehydrogenase, purification, physicochemical properties, substrate
specificity, subunit structure 64.
- Methylophilus**,
methane monooxygenase epoxidation alkenes, formate dehydrogenase role, NADH
generation 6474.
- Methylotrophic bacteria**,
alkanes, alkenes, epoxidation, hydroxylation 4761.
biochemical characteristics, books 906.
culture, growth, use, methane, extraction, coal seams 7870.
culture methodology, proteins production, Japan 4502.
hydrocarbons oxidation 5146.
isolation, propagation, single-cell protein production 9288.
metabolism, sewage treatment, technology, books 5450.
methane oxidation, metabolite enzymes 7871.
serine production 3660.
- 2-Methylthio-1,4-naphthoquinone**,
structure, hydrogen bacteria 6619.
- 4-Methylumbelliferyl esters**,
substrate specificity analysis, proteinase assays 5504.
- 5-Methyl(2,4-dichlorophenoxy)-2-nitrobenzoate**,
inhibition, phosphate-dissolving bacteria growth, rhizosphere, *Triticum aestivum* 4252.
- Metoprim**,
= sulfonamides, antibacterial activity, anaerobic bacteria 3320.
- Methylobacterium**,
antifungal activity, fungi, soil isolates 2286.
- Metrindazole**,
antibacterial activity 2431.
antibacterial activity, anaerobic bacteria 5174.
antibacterial activity, *Bacteroides*, *Escherichia coli*, mixed culture 7999.
antibacterial activity, *Bacteroides fragilis* 8811.
antibacterial activity, *Bacteroides fragilis*, *Escherichia coli*, pure culture,
mixed culture 2447.
antibacterial activity, *Gardnerella vaginalis* 3331.
antibacterial activity, *Trichomonas vaginalis*, association, antagonism, acetic
acid, lactic acid 7090.
Bacteroides fragilis antibiotic sensitivity testing 7130.
Campylobacter fetus subsp. jejuni drug sensitivity testing 4292.
comparison, cefmenoxime, cefotetan, N-formimidoyl thienamycin, anaerobic bacteria
susceptibility 5194.
drug resistance, *Clostridium perfringens* mutants 3294.
drug sensitivity testing, *Bacteroides* 6043.
effects on, *Bacteroides*, growth 6100.
+spiramycin tablets, antibacterial activity, oral cavity isolates 8864.
susceptibility, *Bacteroides fragilis*, relationship, pyruvate dehydrogenase
activity 7089.
- Metriondorus collina subsp. polymorpha**,
infection, *Pyrenomyces* new records, pathogenicity 4147.
- Mevalonic acid**,
metabolism, menaquinones, carotenoids biosynthesis, *Micrococcus luteus* membranes 2839.
- Mexico**,
coffee, *Hemileia vastatrix* rust 5682.
food, Enterobacteriaceae incidences 7594.
overwintering, *Puccinia graminis* f.sp. tritici races, stem rust, *Triticum aestivum* 4961.
Puccinia graminis f.sp. avenae, stem rust, *Avena sativa* 4962.
sewage, fungi analysis 8953.
- Mezlocillin**,
antibacterial activity 6149.
antibacterial activity 9709.
antibacterial activity, *Bacteroides* 748.
- Mezlocillin**, (continued)
antibacterial activity, *Bacteroides fragilis* 7129.
antibacterial activity, conferences 6365.
antibacterial activity, Enterobacteriaceae 745.
antibacterial activity, *Escherichia coli*, *Streptococcus faecalis* 739.
antibacterial activity, gram-positive bacteria, *Haemophilus influenzae* 6143.
antibacterial activity mechanisms, reviews 6151.
antibacterial activity, *Pseudomonas aeruginosa* 6128.
antibacterial activity, *Pseudomonas aeruginosa* 6142.
antibacterial activity, *Pseudomonas aeruginosa*, agar diffusion test 728.
antibacterial activity, *Pseudomonas aeruginosa*, N-acetyl cysteine effects on 5281.
antibiotic sensitivity testing, bacteria 6111.
antibiotic sensitivity testing, gram-negative bacilli 8001.
bactericidal activity, cytology, bacteria 8850.
bactericidal activity, cytology, bacteria 9753.
+cefoperazone, antibacterial activity, gram-negative bacilli, *Staphylococcus aureus* 6146.
+cefuroxime, antibacterial activity, *Pseudomonas aeruginosa*, *Serratia marcescens* 6093.
+cephalosporins, antibacterial activity 6148.
comparison, penicillins, antibacterial activity, gram-negative bacteria, gram-positive bacteria 6141.
+penicillins antibacterial activity synergism, gram-negative bacteria 7058.
sensitivity, bacteria, urinary tract isolates 8813.
stability, β -lactamase 2543.
- Miconazole**,
antibiotic sensitivity testing, yeasts 2502.
= antifungal activity, *Candida albicans* 1633.
antifungal activity, *Curvularia lunata* var. *aenea* 7939.
antifungal activity, *Dermatophytes* 7329.
antifungal activity, dermatophyte fungi 9682.
antifungal agents, interaction, antibacterial activity 1567.
drug sensitivity testing, *Moraxella bovis* 5178.
+imidazole derivatives, antibiotic synergism, antibacterial activity,
Staphylococcus, *Propionibacterium* acnes 5182.
Saccharomyces cerevisiae, effects on sterols biosynthesis 5203.
- Micron-D test**,
Enterobacteriaceae, identification 838.
- Microbial contamination**,
Salmonella enteritidis, seafood 2911.
water pollution, pollution detection methodology, fecal microflora, membrane
filtration 2626.
- Microbial pollution**,
bacteria, sewage, temperature, effects on, rivers 6264.
bacteria, wells, ground water 2623.
coliforms, indicator species, sewage outfalls 3482.
counting methods, wastewater treatment 3466.
drinking water, bacteria, indicator species, conferences 5454.
drinking water, fecal microflora, hydrogen sulfide production detection 3478.
enterovirus, survival, saline environments 1720.
Escherichia coli, coliforms, hydrology, rivers 1724.
Escherichia coli, phages, swimming, recreation sites 8970.
Escherichia coli, Vibrio cholerae, counting methods, estuaries, marine
environment 6258.
estuaries, isolation, *Vibrio cholerae* 2629.
ground water, indicator species, *Salmonella typhimurium*, *Escherichia coli*,
Streptococcus faecalis, phase II, enterovirus 8979.
ground water, pollution monitoring, tracers, phages 3479.
indicator species, coliforms, *Escherichia coli*, surface water 1708.
indicator species, sediments, coastal waters 8065.
Klebsiella pneumoniae survival, pulp mills, industrial effluents, lakes 1715.
marine pollution, measuring techniques, indicator species, *Pelecypoda* 8976.
mathematical models, coastal waters, estuaries 9813.
pollution levels, sewage effluents 1712.
pollution levels, water quality 1721.
pollution monitoring, methodology, surface water, *Salmonella* 8117.
Salmonella, lakes 1723.
sewage effluents, coliforms, sea water 3481.
streams, environmental impact, cattle, grazing, USA, Colorado 8973.
water pollution, feces, Brazil 8971.
water pollution, pollution detection, enterovirus, *Perna canaliculus* 3516.
water, quality control 4452.
water-borne diseases, epidemics, indicator species, water supplies, books 9999.
wells, Ivory Coast 3486.
wells, public health, man, coliforms, Nigeria 8067.
Yersinia enterocolitica, surface water, sediments 2627.
- Microbiology**,
ecology, conferences 909.
immobilized enzymes methodology 7391.
laboratories, methodology, books 9091.
Penicillium, biomass, uranium, pH 8969.
waste water, disinfection, methodology, bibliographies 1698.
- Microcin 15n**,
enzymes inhibition activity, *Escherichia coli* 6235.
- Micrococcales**,
clinical isolates, biochemical characteristics, antibiotics sensitivity 8827.
enterotoxins biosynthesis 3886.
- Micrococcal endonuclease**,
Staphylococcus aureus biosynthesis, carbon dioxide effects on 9182.
- Micrococcus**,
antibacterial activity, dimethyl sulfoxide = antibacterial agents 7919.
bacteria growth, association carbon 8069.
distribution, feeds, radiation disinfection 7605.
enterotoxins biosynthesis 3886.
fermentation, *Pentaclethra macrophylla* seeds 6675.
food contamination, beef, pork, temperature effects on 241.
food contamination, luncheon meat, factors affecting spoilage 2029.
food contamination, opening, salami 2030.
histidine decarboxylase, kinetics 4684.
histidine decarboxylase, N-bromosuccinimide chemical modification tryptophan
residues 24.
identification, latex agglutination methodology 7235.
isolation, poultry, radioresistance, environmental effects 202.

Micrococcus, (continued)

- lactic acid biosynthesis 8206.
lactic acid fermentation, vegetables 5607.
mastitis, disease control, quaternary ammonium compounds, teat dips.
antibacterial activity, cattle 1728.
medical dressings contamination 8073.
milk contamination, udder microflora, sanitation, cattle 5339.
Micrococcus glutamicus,
glutamine synthetase, kinetics, cations effects on 6511.
lysine production 5465.
Micrococcus luteus,
antibacterial activity, *Chromobacterium violaceum* antibiotic Y-T0678H 9768.
antibacterial activity, shikinin- β , β -dimethylacrylate, *Alkanna*
hirsutissima 7081.
antibacterial activity, synthetic gratin 8884.
antibiotic sensitivity testing, antimicrobial agents 5233.
antimicrobial activity, alkylpyridinium iodides 1587.
bioassays indicator species, drug sensitivity testing 6039.
cell membranes, NADH dehydrogenase isoenzymes, isolation, characterization 7348.
cell walls, humic acids interaction, effects on lysozyme activity 590.
fatty acid composition, antibiotic AL-87 effects on 8895.
host-parasite interactions, *Myxobacter*, survival, soil 9569.
lysis, albumin lysozyme antibacterial activity 7052.
membranes, menaquinones, carotenoids biosynthesis 2839.
eryomycin antibacterial activity standardization 8855.
Micrococcus lysodeikticus,
protoplasts, gramicidin S lysis 2577.
Micrococcus saprophyticus,
heat resistance, sodium chloride, eggs effects on 4848.
Micrococcus varians,
vatins production, hydrocarbons utilization, carbon sources, vitamins effects on
7286.
viability, freezing, freeze drying 8116.
Microcosms,
measuring techniques, soil microorganisms, respiration, nutrient loss 571.
Microcylus,
bacteria growth, association carbon 8065.
Microdochium bolleyi,
root rot, *Avena sativa* 4959.
Microellobasporia grisea,
polysaccharides, preparation, characterization, antitumor activity 8346.
Microellobasporia grisea,
antitumor agents, polysaccharides, carbohydrate composition 6587.
polysaccharides, antitumor activity 4707.
polysaccharides, carbohydrate composition, antitumor activity, Ehrlich ascites
tumor 6586.
Microenvironments,
aerobic conditions, media (isolation), *Campylobacter*, methodology 9979.
aerobic environment, xenobiotics biodegradation, microorganisms 4762.
Microflora,
association, composts cattle manure 8061.
bacteria, oil deposits, flooding effects on activity 627.
bacteria, vegetables sprouts 8473.
beef fats, chemical composition 7573.
conalbumin antibacterial activity 5181.
evolution, composting solid wastes, urban environments, biological activity
effects on 8942.
fungi, *Hordeum*, fungicides treatment effects on 7766.
grapes, *Saccharomyces cerevisiae* 3758.
hand, antibacterial activity, chlorhexidine, man 6275.
immune response, relationship, lactoferrin, transferrin, conalbumin antibacterial
activity, Mammalia, reviews 5176.
Nicotiana tabacum, antifungal agents effects on 496.
otitis media, exudates, man, antimicrobial agents treatment, antibiotic
sensitivity testing 1586.
pig isolates, gram-positive bacteria, tylosin effects on macrolide antibiotics
resistance 5156.
treatment pools+U.V. radiation, hospitals 798.
udder, milk contamination, cattle 4820.
udder, sanitation, milk contamination, cattle 5339.
yeasts, apples fruit juices 9279.
yeasts, cheese 7585.
Micromonaspora,
aminoglycoside antibiotics production, media (selective)-gentamicin screening
6107.
dedesosaminyl-5-O-mycamnosyl-10,11-dihydromycinamycin biosynthesis,
characterization 2580.
gentamicin biosynthesis association inoculum quality 6159.
protoplasts, preparation, methodology 6322.
Micromonaspora chalcis,
tetraocarin A biosynthesis 2572.
tetraocarin biosynthesis, carbon-14 incorporation 8905.
tetraocarin biosynthesis, structure, antibacterial activity, gram-positive
bacteria 1671.
Micromonaspora giseraubida,
mycinolide IV, stereochemistry, X-ray crystallography 1652.
Micromonaspora inyoensis,
sisomycin biosynthesis, pH effects on 6229.
Micromonaspora polytrita,
mutants, 20-deoxo-20-dihydro-12,13-desoxy-12,13-dehydrorosaranolide conversion
8908.
Micromonaspora rosaria,
mutagenesis methodology, protoplasts, mycelia fragments 9075.
rosamicin biosynthesis, media (culture) 2726.
Micromonaspora sagamiensis,
mutants, gentamicin, sagamicin, biosynthesis, cobalt, regulation 6195.
Micromonaspora verruculosa,
antibiotic M-92 isolation, antibacterial activity, *Staphylococcus aureus* 6194.
antibiotic M-92, antibacterial activity, antitumor activity 3428.
antibiotic M-92 biosynthesis 3426.
antibiotic M-92, physicochemical properties 3427.
Micronutrients,
Cucumis melo, cucumber mosaic virus= *Sphaerotheca fuliginea*, infection,
effects on 3076.

Microorganisms,

- activated carbon, removal, organic compounds, water 6255.
activity, soil biochemical characteristics, grasses cover, slope exposure,
erosion relationship 7826.
aging, metabolism interaction, association, *Triticum cultivatum* 3943.
alkylbenzene sulfonates biodegradation, association, aromatic compounds 1997.
anaerobic respiration, wastewater treatment 5311.
anaerobic respiration, wastewater treatment, whey use 5325.
animal wastes fermentation, methane gas production, antibiotics effects on 1039.
antibiotics biosynthesis, genetic engineering 7974.
antibiotics biosynthesis, screening, reviews 5339.
antigens, detection, enzyme-linked immunosorbent assay methodology 7216.
antigens, enzyme-linked immunosorbent assay + electrophoresis 6285.
association biodegradation, animal wastes waste treatment 2616.
batch culture, antibiotics biosynthesis 716.
batch culture growth kinetics, mathematical models 9831.
biodegradation, aphidicolin 4752.
biodegradation, glycols, industrial pollution, measuring techniques 5577.
biodegradation, leaf litter, organic matter, alpine environments, Austria 9556.
biodegradation, lubricants, surfactants 9255.
biodegradation, production, fatty acids, antifungal activity, *Calluna vulgaris*
heaths soil, seasonal variations 5930.
biodegradation, respiration, radioactive labelling 3509.
biodegradation, straw, role, soil, volcanic acid, stabilization 5091.
biodegradation, wheat gluten, storage conditions 2915.
biodegradation, industries, conferences 5457.
biological control, disease control, vectors, *Insecta* 6622.
biological control, herbicides 5546.
biological control, pathogenicity, animals 4711.
biological control, plant diseases, books 4550.
biological control, safety 3742.
biological oxygen demand, reactors wastewater treatment 5310.
biomass determination methodology, leaf litter 3513.
biomass, ground water sediments, detection methodology, association, glycerol,
assays 4466.
biomass measurement, relationship, carbon dioxide release, soil 1969.
biomass oxidation, measuring techniques, usa, potassium dichromate 6287.
biomass, soil removal, pasture restoration effects on 3182.
biomass, straw composts, association, *Agaricus bisporus* nutrition 2923.
biomass, tillage, effects on, soil properties, carbon, nitrogen, mineralization
2359.
biomass wastes, quantification, radium adsorption 9828.
bioreactors, books 5448.
biosynthesis, compounds, biological properties 1821.
cadmium bioaccumulation, pollution effects 794.
canker, *Prunus cerasifera*, *Nematoda* effects on pathogenesis 1212.
carrots, washing effects on 5613.
catalysis, steroids conversion 5530.
cell disruption, methodology glass beads 6337.
cell membranes polysaccharides, uronic acid bioassays 5365.
coatings, methodology, scanning electron microscopy 1735.
Cocos nucifera roots wilt, pathogenesis 1227.
colonies, enumeration methodology, association, food contamination control 3585.
contamination, association, food packaging, plastics 1094.
contamination, meat processing, bone 4763.
contamination, media (culture), use biosynthesis, antibiotics 8803.
contamination, milk production, Poland 4785.
contamination, petroleum 5140.
contamination, petroleum, analysis 5139.
contamination source, bottles sterilization, wrenies 258.
contamination, tablets, pressure effects on 3459.
continuous culture, chemostats, growth rate, reviews 7211.
corn+animal wastes silage, fermentation, biochemical characteristics 4868.
2,4-D biodegradation, glucose association 9266.
death kinetics, sterilization, media (culture) 7963.
decomposition activity, *Saccharum bagasse*, composts production 7560.
decrements effects on enzymes metabolism, reviews 5339.
disease control, pruning wounds, fungicides treatment 7767.
disinfection, wastewater treatment, ozonation 5324.
distribution, films, radiation disinfection 7605.
distribution, feeds, activated sludge, sewage treatment models 8948.
drugs production models, Mammalia metabolism, conferences 7467.
Dutch elm disease, *Ulmus glabra*, *Scolytus* vectors, Dutch elm disease,
microorganisms, *Ulmus glabra*, *Scolytus* vectors 1453.
ecology, *Crotalaria juncea* leaves, morphant treatment 7757.
effects on, roots, growth, *Lupinus albus* 582.
energy balance, mathematical models 8191.
enumeration, membrane filtration 3512.
enumeration methodology, association, substrates uptake, aquatic environment 818.
enzymes, sodium, forests soil analysis, land reclamation 7822.
ethanol, fermentation 2861.
ethanol production, whey 3762.
extracellular polymers biosynthesis, reviews 1951.
extraterrestrial life, concentration, electric fields methodology 9001.
feeding patterns effects on glucose metabolism, relationship activated sludge
6247.
feeds contamination, quality control 4862.
fermentation, factors affecting, reviews 1986.
films, factors affecting formation 1707.
food contamination, cold storage 242.
food contamination, counting methods 4841.
food contamination, dairy products, hygiene control 4846.
food contamination, effects on rice composition 7588.
food contamination, food additives 257.
food contamination, meat, enumeration methodology 3613.
food contamination, meat production 199.
food contamination, meat products quality control 7566.
food contamination, meat, sampling methodology 9006.
food contamination, meat, sewage sludge feeding regimes, cattle 4803.
food contamination, standards 3849.
food poisoning, isolation, identification, books 8186.
fragrances, characterization, production 4718.
fuels biodegradation 5990.
genetic engineering 9101.
genetic engineering, fermentation, books 7276.
genetic engineering, fermentation, reviews 6585.

Microorganisms, (continued)

- genetic engineering, products biosynthesis, books 8175.
 growth, association, polymers solutions, use, pharmaceuticals coatings 5345.
 growth conditions, olives oil cake biodegradation 4746.
 growth, products yields, aerobic conditions 9103.
 growth, wine storage, atmospheric conditions 4877.
 heat balance, in vitro, calorimetry + fermenters measuring techniques 7215.
 heat disinfection, models 4461.
 immobilized cells, oxygen supply, hemoglobin, fluorine organic compounds 6286.
 immobilized cells, production, hydrogen, ammonia, reviews 6607.
 inactivation, food, spoilage rates, incubation temperature effects on 2926.
 industrial microbiology, books 4548.
 industrial wastes digestion (anaerobic), methanogenesis, reviews 7196.
 infection, plants, 2-chlorethylphosphonic acid effects on pathogenicity 319.
 isolation, drugs 6086.
 kaolinite binding, methodology, bioreactors 5357.
 leaf litter decomposition, nutrient dynamics, calcium oxalate occurrence, forests, *Eucalyptus diversicolor* 4136.
 lignocellulose biodegradation 3800.
 lysis, proteinase, glucanase 1917.
 lytic enzymes analysis 7369.
 media (culture), gases solubility, reviews 8082.
 membrane permeability, enzymatic activity, haloalkylmalonic esters, alkyl phenoxypolycondolates, 2-methyl-5-alkyl-5-phenoxy-1,3-dioxane, effects on 7957.
 membrane lipids, relationship soil sediments 5104.
 metabolism, hydrocarbons, aromatic compounds, estuaries sediments 5145.
 microbiology, soil pollutants, phytotoxicity, *Cucumis sativa* 4193.
 microbiology, books 8184.
 milk biodegradation, soil 163.
 mineralization, 3,4-dichloroaniline + humic acids, complex 4745.
 mucus, fixation methodology 3514.
 Mytilus edulis, biodegradation, metabolites, sterols 7554.
 NADH dehydrogenase analysis, NADH oxidation complexes immobilization 8317.
 nephelometry methodology 5360.
 nitrous oxide biosynthesis 1968.
 nutrient solution contamination, intravenous administration 5333.
 oil biodegradation 5147.
 oxygen uptake measurement methodology, activated sludge 5359.
 pathogens, biological control, Mollusca 1011.
 pathogens, biological control, weed control, books 8183.
 pathogens, immunoassays detection, Insecta 1736.
 peat biodegradation 2877.
 phenanthrene metabolism, replica plating, detection, enumeration 3577.
 phosphates solubilization, relationship, soil phosphates content 4195.
 pistachios contamination, ice cream production, association, radiation treatment 4838.
 plant debris biodegradation, acids effects on, lakes, polar environments 1995.
 pollutants biodegradation, seasonal variations, water salinity effects on, aquatic environment 2876.
 polysaccharides activity, bioreactors, mathematical models 1064.
 populations, South Africa Rep. plains 4217.
 post-harvest decay, barley, storage, long-term effects 1321.
 production lysine + wheat flour, nutritive value, rats 5632.
 reactivation, association, heat treatments, sterilization 2499.
 relationship soil, mountains, USSR 7827.
 relationship, wastewater treatment 5330.
 respiration, models, oxygen electrodes 9007.
 rocks habitat, ecophysiology, Antarctica 9548.
 role, composting mechanisms, reviews 6249.
 Saccharum officinarum fermentation, post-harvest decay 439.
 secondary metabolism, antibiotics, extracellular enzymes, books 3636.
 selection, use antibiotics 8805.
 siderophores detection, electrophoresis methodology 8090.
 single-cell protein, nutrient sources, dogs 3851.
 single-cell protein production, petroleum use 2930.
 soaps contamination 2641.
 soil isolates, lignins biodegradation, anaerobic conditions, Egypt, Arab Rep. 8428.
 steroids biosynthesis, utilization, technology 4698.
 storage, preservation, culture collections 5383.
 strains combination cultivation, enzymes, antibiotics, biosynthesis improvements, reviews 6548.
 succession, leaf litter decay, polar environments, lakes 1061.
 sulfur oxidation, solid wastes 3471.
 taxonomy (numerical), computer programs, proteins electrophoresis 8091.
 transformation, nitroaromatic compounds, sewage 5288.
 use, agricultural practices, books 8174.
 use, hydroxylation, steroids, reviews 7218.
 use, wastewater treatment 8958.
 wastewater treatment, trickling filters 5295.
 water, pollution, ecology 1713.
 water purification, methodology 1714.
 xenobiotics biodegradation, aquatic environment, microenvironments 4762.
 xenobiotics biodegradation, factors affecting 3788.
 xenobiotics conversion, ecosystem dynamics 6961.
- Microspilopsora faeni**,
 disease control, factors affecting, barley storage 7724.
- Microscopcy**,
 analysis, *Phakopsora pachyrhizi* rust, Glycine max leaves 8543.
 atelic microorganisms, observation methods 2647.
 fluorescence, *Brassica campestris*, pathogenesis, *Aspergillus nidulans*,
Penicillium verrucosum var. *cyclopium*, *Verticillium lecanii* 2188.
 fluorescence, detection, brown rot fungi, *Pinus palustris* decay 4047.
 fluorescence, soil microorganisms colonization, *Cochliobolus sativus*, conidia,
 hyphae 3625.
 fruits, nuts, spoilage, bibliographies 5034.
 pathogenicity, *Hordeum vulgare* powdery mildew 6775.
 urine, detection, bacteriuria, man 2695.
- Microsomes**,
 cytochrome P-450, NADPH-cytochrome reductase, fractionation, *Rhizopus nigricans* 6468.
 cytochrome P-450, purification, characterization, *Candida tropicalis* 2750.
- Microspora alni**,
Platanus racemosa, leaves lesions, measuring techniques, computer applications,
 video image analysis 4924.
- Microspora diffusa**,
 powdery mildew, Glycine max, USA, Delaware 4934.
- Microsporon canis**,
 antifungal activity, pentachloronitrobenzene metabolites 8789.
- Microsporium**,
 incidence, soil, Germany, Fed. Rep. 3185.
 isolation, floors, education institutions 8963.
- Microsporum canis**,
 proteinase, purification, characterization, keratin degradation 7367.
- Microthrium**,
 decomposition, leaf litter, *Abies alba* 2301.
- Microthrium eucalypti**,
 leafspot, Eucalyptus, New Zealand 7706.
- Microwave oven**,
 use, temperature jump studies, bacteria gene amplification 9892.
 cooking, beef, bacteria survival 210.
- Microwave radiation**,
 inactivation, *Bacillus globigii* spores, aerosols 9706.
 sterilization, culture systems plastics, bag 706.
 use, decontamination, *Salmonella* sentenberg, corn soybean milk 3839.
- Midecamycin**,
 antibacterial activity, new records 8893.
 conversion, neoisomidecamycin 4414.
 + polymyxin B, + carbacillin, + dibekacin, + fosfomycin, antibiotic synergism,
 antibacterial activity, *Pseudomonas aeruginosa* 1669.
- Midgut**,
 Bombyx mori larvae, cells, *Bacillus thuringiensis* toxins pathogenesis 3738.
 histopathology, toxins, *Bacillus sphaericus*, *Culicidae* 1022.
- Milbemycin J**,
 Streptomyces hygroscopicus subsp. aureolacrimosus, biosynthesis, physicochemical properties 8901.
- Milbemycin K**,
 Streptomyces hygroscopicus subsp. aureolacrimosus, biosynthesis, physicochemical properties 8901.
- Milbemycins**,
 biosynthesis, Streptomyces, characterization 6217.
 biosynthesis, Streptomyces, Streptomyces hygroscopicus subsp. aureolacrimosus 9787.
 Streptomyces hygroscopicus subsp. aureolacrimosus, biosynthesis, isolation,
 Physicochemical properties 8900.
 X-ray crystallography, structure 9792.
- Mildew**,
 disease control, nitrogen fertilizers, fungicides, *Hordeum vulgare* 5838.
 Erysiphe graminis, disease resistance, relationship, cytokinins levels, grain,
Triticum aestivum, *Hordeum vulgare* 2249.
 + frost disease resistance, Vitis vinifera, nitrogen metabolism 7688.
- Military personnel**,
 oral hygiene, relationship oral diseases, Greece 8080.
- Milk**,
 aflatoxin M1, inactivation, hydrogen peroxide, ± riboflavin, ± peroxidase
 aflatoxin M1, thermal stability, pH stability 8505.
 aflatoxin M1, toxicity, bioassays 3877.
 aflatoxins contamination, reviews 283.
 antibiotics levels, inhibition starter cultures, cheese 8482.
 antibiotics residues, identification methodology 8474.
 association infectious diseases, man 9275.
 bacteria contamination, food quality, storage 4837.
 bacteria contamination, milking machines 4823.
 bacteria contamination, organoleptic evaluation, standards 4839.
 bacteria, contamination, quality control 4834.
 bacteria contamination, tests washing effects on, cattle 5350.
 bacteria, counting methods, automated method 215.
 bacteria endotoxins detection, Limulus lysate test 8478.
 bacteria, food contamination, conferences 5458.
 bacteria growth, refrigeration, storage 4826.
 bacteria, measuring techniques, fluorescence, filters 6673.
 bacteria, spoilage, pasteurization, off flavor 2913.
 biodegradation, microorganisms, soil 163.
 buffaloes, contamination, psychrotrophic bacteria, spore-forming bacteria 7578.
 Campylobacter coli, Campylobacter fetus subsp. jejuni, survival, temperature effects on 189.
 Campylobacter fetus subsp. jejuni, contamination 487.
 Campylobacter fetus subsp. jejuni food contamination, man, enteritis 1078.
 Campylobacter fetus subsp. jejuni incidence, isolation methodology 8131.
 cheddar cheese starter cultures, contamination, phages 4804.
 Clostridium biodegradation 6666.
 Clostridium separation, centrifugation 8480.
 cold storage, bacteria contamination, growth 4827.
 cold storage, dissolved oxygen, growth, psychrotrophic bacteria 239.
 + colostrum, lactic acid bacteria, fermentation, food sources, juveniles, cattle 7599.
 comparison methodology assays psychrotrophic bacteria 1073.
 contamination, anaerobic bacteria, spores 4829.
 contamination, bacteria, pathogens 4818.
 contamination, bacteria, relationship, under preparation, cattle 4798.
 contamination, bacteria, sanitation, milking machines 5341.
 contamination, sanitation, under microflora, cattle 5339.
 contamination sources, spore-forming bacteria 4812.
 contamination, under microflora, cattle 4820.
 dairies, storage, bacteria, contamination, growth 4832.
 detection, tetracyclines 4393.
 enterotoxins production, Escherichia coli, Yersinia enterocolitica 1111.
 fermentation effects on vitamins 4854.
 flavor, Lactobacillus, activity, threonine aldolase, alcohol dehydrogenase, effects on 7587.
 flora, Escherichia coli, Pseudomonas fluorescens, β-casein biodegradation 2020.
 food contamination, Campylobacter fetus subsp. fetus, most probable number 231.
 food contamination, Pseudomonas aeruginosa, pH effects on 4795.
 food contamination, psychrotrophic bacteria, reviews 226.
 gel chromatography, detection, aflatoxin M1 5642.
 goats, fermentation, starter cultures 9268.
 gram-negative bacteria food contamination, Limulus lysate test use detection food quality 8484.
 heat treatments effects on Streptococcus lactis 8470.

Milk, (continued)

- heat treatments, effects on, *Streptococcus thermophilus*, *Lactobacillus acidophilus* 6664.
isolates, antibiotic resistance, *Escherichia coli* 4779.
isolation, bacteria 3826.
 β -lactam antibiotics, bioassays, *Bacillus stearothermophilus* 720.
 β -lactam antibiotics, bioassays, *Bacillus stearothermophilus* 721.
lactic acid bacteria, isolation, identification, aromatic compounds production 1068.
Lactobacillus acidophilus, lactose digestion, intestinal microflora, man 7581.
Lactobacillus bulgaricus, *Lactobacillus casei*, γ radiation induction mutants, acid production, proteolytic enzymes activity 8200.
pasteurization, contamination, bacteria 8500.
pasteurization, *Campylobacter fetus* subsp. jejuni, heat sensitivity 2060.
pasteurization, chemical analysis, bacteria 191.
pasteurization, psychrotrophic bacteria, lipase inactivation 263.
penicillin assays 4852.
pewee, detection, aflatoxin M1 6693.
production, bacteria fermentation, effects on proteins 4805.
proteins, *Lactobacillus bulgaricus* proteinase effects on 4796.
Pseudomonas fluorescens, growth, proteolysis 4828.
Pseudomonas fluorescens proteinase effects on 8310.
Pseudomonas growth, refrigeration, storage 4830.
psychrotrophic bacteria growth, inhibition, potassium sorbate + *Lactobacillus* 7579.
psychrotrophic microorganisms analysis 6665.
relationship, yoghurt starter cultures, *Streptococcus thermophilus*, *Lactobacillus bulgaricus* 3848.
role, disease transmission, reviews 211.
samples, enumeration, foot-and-mouth disease, cattle 4767.
sheep, antibiotics excretion effects on yogurt production 4871.
spoilage, bacteria, off flavor 183.
spoilage, bacteria, proteinase, off flavor 4815.
spraying, drying, bacteria survival 4876.
spraying, drying, indicator species, food contamination 4875.
storage, bacteria contamination 4824.
Staphylococcus aureus enterotoxins, enzyme-linked immunosorbent assay 1109.
Staphylococcus aureus, enterotoxins production, deoxyribonuclease production 2591.
Staphylococcus aureus isolates, enterotoxins toxigenicity 6716.
sterilization, γ radiation 8496.
storage, psychrotrophic bacteria growth 9273.
substitutes, feeding, juveniles cattle, *Escherichia coli* isolation, antibiotic sensitivity testing 8742.
trace elements, activity relationship, propionic acid bacteria, lactic acid bacteria 8477.
ultrafiltration, bacteria, inorganic compounds membranes 4782.
ultrahigh temperature pasteurization, bacteria centrifugation, organoleptic properties 2933.
ultrahigh temperature, pasteurization, limulus lysate test, detection, bacteria 201.
wastewater treatment capacity, dairies 1701.
- Milk production,**
contamination, microorganisms, Poland 4785.
- Milk products,**
aflatoxins contamination, reviews 283.
aflatoxins, high-performance liquid chromatography, fungi 3875.
Aspergillus aflatoxin M1 detection, high-performance liquid chromatography 7614.
costing, biodeterioration 6666.
counting methods, yeasts, fungi, media (isolation) 4530.
fermentation effects on lactose 4855.
food contamination, standards, counting methods, methodology 3805.
frozen food, India, bacteriology quality 6679.
India, *Staphylococcus* food contamination, incidence 2058.
isolation, *Streptococcus* group D, deoxyribonuclease activity 2919.
media methodology, *Streptococcus* lactic acid fermentation 5426.
membranes ultrafiltration, bacteria, hygiene 4791.
polyethylene packaging, oxygen permeability, spoilage, yeasts, fungi 4884.
production, bacteria fermentation effects on proteins 4805.
psychrotrophic microorganisms analysis 6665.
- Milk-clotting enzymes,**
Bacillus licheniformis, biosynthesis, characterization, immobilization 4613.
casein proteolysis, *Mucor racemosus* 7357.
purification, characterization, *Ipex lacteus* 6521.
purification, characterization, *Mucor racemosus* 7358.
- Milking machines,**
bacteria contamination, milk 4823.
cleaning systems, water disinfection, bacteria contamination 5342.
contamination sources, spore-forming bacteria, milk 4812.
hygiene, bacteria enumeration, direct epifluorescent filter technique 6270.
sanitation, cleaning systems, detergents 2632.
sanitation, milk, contamination, bacteria 5341.
- Mimosa clausenii,**
mycorrhizas, characterization 5899.
- Mincod meat,**
beef, food contamination, *Alteromonas putrefaciens*, *Pseudomonas putrefaciens* 3841.
food contamination, *Campylobacter fetus* subsp. jejuni, media (selective) 1071.
soybeans proteins, spoilage, bacteria, temperature effects on 228.
- Mineral oil,**
disease control, plant viruses 5813.
- Mineral water,**
bottles, contamination, bacteria 2027.
- Mineralization,**
aromatic compounds, bacteria, lakes, sewage 2008.
biogeochemical cycles, soil, nitrogen, particle size, soil microorganisms 8697.
carbon dioxide formation, 2,4-D degradation, bacteria, soil 5909.
carbon, nitrogen, tillage, effects on, soil properties, microorganisms, biomass 2359.
3,4-dichloroaniline + humic acids, complex, microorganisms 4745.
nitrate, soil microorganisms, agricultural practices 8684.
nitrogen cycle, agricultural ecosystems, *Oryza sativa* 3224.
nitrogen cycle, nutrient dynamics, plantations, *Theobroma cacao* 3222.
nitrogen, forests, disturbance, nutrient dynamics 6901.
nitrogen, forests soil 523.
nitrogen, fungi, forests nitrogen cycle 514.

Mineralization, (continued)

- nitrogen, *Pseudomonas cepacia*, grazing, association, Mesodiplogaster, *Acanthamoeba polyphaga*, effects on 514.
nitrogen, sewage sludge land disposal, salinity effects on 8955.
nitrogen, soil acidification, forests, mathematical models 4138.
nitrogen, soil, *Fagus* forests, association, nitrifying bacteria, ammonifying bacteria, seasonal variations 4137.
nitrogen, soil properties, forests 6895.
nitrogen, soil treatment, mycelia, organic matter 5949.
organic compounds, bacteria, freshwater environments, sewage 2012.
phosphatidylcholine, soil pH effects on 5967.
phosphatidylcholine, soil microorganisms, enzymatic activity, nutrient sources, plants 5915.
phosphorus, oil shales, *Pseudomonas*, *Rhabditis* 556.
phosphorus, soil properties, forests, measuring techniques 521.
soil microorganisms, agricultural practices, crop fields, *Trifolium* 8680.
soil properties, soil microorganisms 8667.
sulfur, nitrogen, soil microorganisms, nutrient cycles, soil 6996.
sulfur, sulfoliquovos, soil microorganisms, soil, forests, USA, North Carolina 6904.
- Minerals,**
decomposition, *Aspergillus niger* 8454.
oil sprays, use, control, disease spread, potato virus Y infection, *Solanum tuberosum* 1243.
soil, association, *Tsuga heterophylla*, ectomycorrhizas symbiosis, relationship, survival 3164.
uptake, *Zea mays*, rhizosphere microorganisms effects on 4190.
- Mines,**
coal, bacteria, methane oxidation 4265.
coal, land reclamation, seedlings, inoculation, fertilizers slurries + *Rhizobium* 8691.
coal, reclaimed land, iron-oxidizing bacteria, vertical distribution levels 9561.
coal, soil microorganisms, community composition, organic matter decomposition 5914.
coal, wood supports, brown rot, white rot 6934.
drainage, effects on, lakes, bacteria, community structure 8068.
drainage, iron II oxidation, acidophilic iron-oxidizing bacteria 1515.
land reclamation, ectomycorrhizas effects on revegetation, *Pinus taeda* 2305.
land reclamation, endomycorrhizas spores abundance, rhizosphere, trees 9541.
land reclamation, *Phaseolus vulgaris* inoculation, *Rhizobium phaseoli*, nitrogen fixation 5108.
land reclamation, *Pinus taeda*, mycorrhizas, soil amendment, revegetation 2302.
land reclamation, revegetation, soil amendment, vesicular-arbuscular mycorrhizas colonization roots, *Agropyron trachycaulum* 9542.
revegetation, mycorrhizas inoculation, *Coniferales* 519.
soil pH, growth, nodulation, *Alnus glutinosa* 555.
soil pH, soil amendment, *Agropyron trachycaulum*, vesicular-arbuscular mycorrhizas symbiosis 4203.
USA, forest products, Basidiomycetes biodegradation 7792.
waste water, rivers contamination, temperature effects on bacteria iron oxidation 5134.
- Minicells,**
Escherichia coli, isolation, purification, methodology 9888.
- Mining,**
ores, bacteria, leaching 5135.
- Minitek test,**
identification, clinical isolates, non-fermentative gram-negative bacteria, oxidase-positive bacteria 9019.
identification, *Lactobacillus* 9051.
- Minoocycline,**
antibiotic resistance, *Staphylococcus aureus* clinical isolates 3288.
comparison, tetracycline, transport, relationship, susceptibility, *Escherichia coli* 1635.
comparison, thiacycline, antibacterial activity 1637.
Mycobacterium antibiotic sensitivity testing 7996.
Mycobacterium tuberculosis, antitubercular agents 8898.
- Mironomospira griesorubra,**
mycaminicins, components, physicochemical properties 8204.
- Misonidazole,**
m-AMSA, effects on radiosensitization, toxicity, *Escherichia coli* 666.
- Mitochondria,**
adenosinetriphosphatase stabilization proteins, amino acid sequence, yeasts 8274.
adenosinetriphosphatase, *Toxoplasma* inflatum elvaseptin inhibition 5.
coupling factor 1, purification, 5-p-fluorosulfonylbenzoyl adenosine chemical modification, *Saccharomyces cerevisiae* 943.
isolation, *Neurospora*, mycelia breakage methodology 4536.
membrane structure, antifungal activity, demosan 1416.
mutants, *Saccharomyces cerevisiae*, ethanol production 8409.
proteolipids, purification, characterization, yeasts 913.
Pseudomonas syringae pv. *syringae*, syringomycin, syringotoxin, effects on, *Zea mays* 2966.
respiration uncouplers, antifungal activity, toxaprofen, *Trichophyton mentagrophytes*, *Trichophyton rubrum* 8786.
Saccharomyces cerevisiae, mutants, ethanol production, aerobic conditions 3749.
uncouplers, leucostatin B, stereochemistry 9777.
yeasts, isolation methodology 8170.
yeasts, rRNA 21S genes, erythromycin resistance 1526.
Zea mays, proteins electrophoresis, disease resistance, Helminthosporium maydis 8616.
- Mitogillin,**
N-terminus amino acid sequence, homology α -sarcin, restrictocin, *Aspergillus* 114.
- Mitomycin C,**
bacteriocins biosynthesis induction, *Erwinia* 760.
- Mitoisa,**
roots, *Sorghum vulgare* seedlings, *Periconia circinata* phytotoxins effects on 9344.
- Mixed culture,**
Bacteroides fragilis, *Escherichia coli*, metronidazole antibacterial activity 2447.
fungi, protein biosynthesis, whiskey distilleries wastes 15.
Hydroxydion reductum + Tetralesins, environmental conditions effects on fermentation 2658.
Lactobacillus, *Propionibacterium*, growth 2917.
Pseudomonas putida + *Alcaligenes eutrophus*, arsenic oxidation 2383.

- Mizonazole**,
Candida plasma membranes, effects on potassium release 6061.
- Models**,
sewage treatment, films, activated sludge 8949.
sewage treatment, films, activated sludge, microorganisms distribution 8948.
- Modification**,
enzymatic, aminoglycoside antibiotics, association, antibiotic resistance, *Pseudomonas aeruginosa*, Enterobacteriaceae 640.
- Moonocyclin A**,
structure, analogs 8912.
- Moisure**,
effects on blueberries post-harvest decay, *Alternaria*, *Botrytis* 5032.
- Molasses**,
effects on *Brevibacterium* growth, lysins biosynthesis 7643.
fermentation, *Saccharomyces cerevisiae* 1991.
+ glucose, carbon sources, *Saccharomyces cerevisiae* production 3806.
Industrial effluents, wastewater treatment, digestion (anaerobic) 4445.
= liquids *Streptomyces solutes*, digestibility, cattle 4867.
nutrient sources, *Candida*, single-cell protein production 5628.
Saccharum officinarum, ethanol fermentation yeasts, technology 142.
Saccharum officinarum, yeasts, oxygen tension effects on ethanol fermentation 143.
solution, *Aspergillus niger* fermentation, citric acid biosynthesis 5475.
- Mold**,
food contamination, effects on rice composition 7586.
- Molds**,
antifungal agents effects on *Nicotiana tabacum* microflora 496.
asymmetry hydrolysis, 1-acetoxy-2,3-dichloropropane 158.
food contamination, fruits products, counting methods 4775.
grains, nutritive value, chicks 3852.
media (selective), quality control 7212.
- Molecular weight**,
pyruvate dehydrogenase multienzyme complexes subunits, comparison *Saccharomyces carlsbergensis*, *Saccharomyces cerevisiae* 52.
trostin 6211.
wheat mosaic virus, structural proteins 2117.
- Mollusca**,
biodegradation, pathway, soil types, flooded soils 5886.
- Molluscias**,
biosynthesis, ATP, AMP, ADP 9220.
X disease, *Colladonus montanus* disease transmission, *Prunus* 4973.
- Mollusca**,
biological control, pathogens, microorganisms 1011.
- Moloney leukemia virus**,
virions, infection, cells, interferon, antiviral activity, biochemical analysis 698.
- Moloney sarcoma virus**,
transformed cells, fibroblasts, interferon inhibition growth 3369.
- Molybdenum**,
containing formate dehydrogenase (NADP⁺), purification, activity, C.D., E.S.P., absorption spectroscopy, *Clostridium thermocellum* 8280.
levels, nitrogenase cofactors, *Clostridium pasteurianum* 4593.
nitrogen fixation enhancement, *Azotobacter vinelandii* 3211.
- Momordica balsamina**,
sour cherry necrotic ring spot virus infection 2144.
- Momordica charantia**,
wild, pathogenicity, *Fusarium oxysporum* f.sp. *momordicae* 3093.
- Moraxella K**,
Mucor hemalis hydroxylation 7552.
- Moraxemycin**,
physicochemical properties, *Streptovorticillum*, taxonomic significance 7163.
- Monensin**,
antiviral activity, herpes simplex virus 1 infected cells 7943.
biosynthesis, nutrient requirements, valine, isoleucine, *Streptomyces cinnamonensis* 8016.
biosynthesis, plasmid pSM1 role, *Streptomyces cinnamonensis* 2744.
effects on rumen microorganisms cellulose biodegradation 9260.
- Monensin A**,
Streptomyces cinnamonensis, biosynthesis 8885.
- Monensin B**,
Streptomyces cinnamonensis, biosynthesis 8885.
- Monilia**,
benomyl resistance, measuring techniques, media 7887.
infection, *Vaccinium*, *Gaylussacia* 4012.
post-harvest decay, prunes 5801.
- Monilia fructicola**,
blossom blight, benomyl resistance, disease control, *Prunus persica* 5835.
brown rot, disease control, fungicides, orchards, *Prunus persica* 1405.
fungicides effects on, growth, sporulation, isolation 2282.
growth rate, benomyl effects on 1413.
infection, *Prunus persica* benomyl resistance, comparison treatment, captan, prochloras 5719.
infection, *Prunus persica*, fungicides resistance, pathogenicity 2278.
melitobites, monodikols, isolation, structure 6620.
overwintering, *Prunus persica*, fungicides effects on sporulation 7763.
- Monilia laxa**,
infection, fruit trees, Australia 8569.
resistance, iprodione, vinclozolin 7900.
- Monilia polycolidi**,
infection, *Vaccinium stamineum*, *Gaylussacia baccata* 4012.
- Monilia vaccinii-corymbosi**,
infection, *Vaccinium corymbosum* 4012.
- Monitoring**,
sanitation, food processing 805.
- Monobactams**,
antibiotic SQ 26,917, β -lactamase stability, antibacterial activity, gram-negative bacteria, anaerobic bacteria 8039.
binding, penicillin-binding protein, *Escherichia coli*, *Staphylococcus aureus*, association, antibacterial activity 3375.
biosynthesis, association, sulfur, metabolism, *Chromobacterium violaceum*, *Acetobacter*, *Agrobacterium radiobacter* 5266.
- Monocarbonyls**,
biosynthesis, *Streptococcus lactis*, *Streptococcus cremoris*, association, cream ripening 205.
- Monocerin**,
Exserohilum turcicum, phytotoxicity, *Sorghum halpense* 3959.
- Monochaetia unicornia**,
canker, *Cupressus lusitanica*, incidence, Kenya 4151.
- Monocillium**,
rifamycin B oxidase, purification, substrate specificity 2766.
- Monoclonal antibodies**,
conjugation, fluorescein, *Chlamydia trachomatis* detection, McCoy cells 9923.
enzyme-linked immunosorbent assay, feline leukemia virus 9850.
enzyme-linked immunosorbent assay, typing, herpes simplex virus 1, herpes simplex virus 2 9843.
fluorescence immunoassays, gentamicin 9763.
indirect fluorescent antibody test, respiratory syncytial virus 9655.
myeloma proteins, use, enzyme immunoassay, detection, *Salmonella*, methodology 7241.
precipitation, methodology, molecular weight, antigenic determinants, glycoproteins, Rauscher leukemia virus 1748.
production, hybridoma, *Bacillus thuringiensis* δ -endotoxin 305.
radiometry immunoassays, detection poliovirus antibodies 1758.
use, enzyme-linked immunosorbent assay, detection, bovine leukemia virus antibodies 4474.
use, identification, nuclear polyhedrosis virus, methodology 2652.
- Monocytes**,
coagulation, endotoxins, assays 3893.
- Monolaurin**,
antifungal activity 689.
= butylated hydroxyanisole, \pm sorbic acid, \pm methyl hydroxybenzoate, antiviral activity 700.
- Monolidols**,
Monilia fructicola, isolation, structure 6620.
- Monomethyl 3-chlorolamellolate**,
Verticillium lamellicola, characterization 8378.
- Monomycin**,
antibiotic resistance, *Pseudomonas aeruginosa* 7023.
Salmonella clinical isolates, antibiotic sensitivity testing 6112.
Yersinia pestis antibiotic sensitivity testing 6110.
- Monooxygenase**,
activity, 2-oxo- Δ^2 -4,5-trimethylcyclopentylacetic acid oxidation, *Pseudomonas putida* 1881.
- Monophenol monooxygenase**,
apoenzymes, copper reconstitution, kinetics, mechanisms, *Neurospora* 2762.
- Monosodol glutamate**,
stimulation, *Streptomyces fradiae*, tylosin, production, batch culture 4425.
- Monosporascus eutypoides**,
infection, *Cucumis melo*, soil moisture, temperature, effects on, growth 5758.
fruit, *Cucumis melo* collapse, Israel 9380.
- Monoterpenes**,
Eremothecium ashbyi, biosynthesis 2385.
Pinus radiata, effects on, *Dothistroma pini*, spore germination, needle blight 4143.
- Monotropa hypopitys**,
mycorrhizas development, ultrastructure 2328.
- Monotropa**,
mycorrhizas, ecophysiology, nutrient transport, absorption, nitrogen sources, phosphate 9538.
- Montane environments**,
forests, soil microorganisms, nutrient cycles, succession 2297.
USA, California, mudflows, soil organic matter accretion, nutrient cycles, biological activity 9566.
- Moraxella**,
fishery products, storage conditions, carbon dioxide, nitrogen, temperature, effects on 8498.
spoilage, beef, vacuum packaging, refrigeration 5638.
- Moraxella bovis**,
drug sensitivity testing, miconazole 5178.
- Morganella morganii**,
 β -lactamase, hydrolysis, cephalosporins, derivatives, structure-activity relationships 5241.
mezlocillin + penicillins antibacterial activity synergism 7058.
- Moroccan pepper virus**,
identification, *Solanum melongena* isolates 8568.
- Morphactin**,
treatment, *Crotalaria juncea* leaves, microorganisms ecology 7757.
- Morphine**,
production, distribution, *Papaver somniferum*, *Sclerotinia sclerotiorum* stems infection effects on 6812.
- Morphology**,
Neisseria meningitidis, penicillin effects on 738.
Proteus 657.
roots, vesicular-arbuscular mycorrhizas 587.
- Mortality**,
association, *Botryosphaeria dothidea*, *Pinus eliotii* var. *eliotii*, *Pinus taeda* 5870.
biological control, *Bacillus sphaericus*, pathogens, *Bacillus thuringiensis*, *Culicida* 2850.
Quercus, *Hypoxylon atropunctatum* canker, association drought 5074.
- Mortality factors**,
fungi pathogens, forests, *Fagus*, *Magnolia* 4171.
- Mortierella**,
incidence, association, heavy metals gradients, soil, Sweden 6698.
infection, *Hordeum* cell culture 1177.
- Mortierella indohii**,
zygospores formation, observation methods 3627.
- Mortierella isabellina**,
biodegradation, 12,14-dichlorodehydroabietic acid 6657.
- Mortierella subtililima**,
leaf litter biodegradation 3771.
- Morus**,
dwarf disease, cytopathology, *Mycoplasma* 9375.
extracts, antifungal activity, disease resistance 4084.
- Morus indica**,
phytoliths, nitrogen-fixing bacteria, nitrogen fixation 9590.
- Mosaic disease**,
bean common mosaic virus, *Phaseolus vulgaris* disease resistance 5815.
Capsicum frutescens, epidemiology, potato virus Y 3032.

Mosaic disease, (continued)

- cassava latent virus, *Manihot esculenta*, etiology, pathogenesis 9413.
- cassava latent virus, *Manihot esculenta*, transmission, *Nicotiana benthamiana*, tissues ultrastructure 1315
- Corynebacterium michiganense* subsp. *tesellarius*, *Tribicum aestivum* 4966
- Cucumeropeps edulis*, viruses etiology, isolation, characterization, Nigeria 4025
- maize white line mosaic virus asymptomatic infection, *Zea mays*, incidence 4969
- Manihot esculenta*, cassava common mosaic virus, heat treatments 1312
- potexvirus, *Crotalaria spectabilis* 4981
- potyvirus, *Bambusa arundinacea* 5705
- Prunus*, *Malus*, *Ilavrus* isolates 5740
- Telfaira occidentalis*, disease resistance 5042.
- Triticum, viruses etiology, India 3953.

Mossbauer spectroscopy,

- hydrogenase, *Desulfovibrio gigas* 4634.

Most probable number,

- computer applications 9829.
- counting methods, bacteria, viability 5431.
- detection, bacteria, aquatic environment, use, calculator 8139.

Motor task performance,

- man, toothbrushing, dental hygiene 7209.

Motor vehicles,

- human impact, tundra soil, arylsulfatase activity, soil moisture, USA, Alaska 5951.

Mounds,

- soil microorganisms, population dynamics, Isoptera, Kenya 8669.

Mountains,

- microorganisms relationship, soil, USSR 7827.

Mouse hepatitis virus,

- antibodies, detection, radioimmunoassay 7232.

Mouthwashes,

- antibacterial activity, man, in vivo 6046.
- copper, zinc, retention, dental plaque inhibition, man 8998.
- fluoride, dental caries prevention, man 3501.
- fluoride, prophylaxis, dental canes, man 8986.
- sodium fluoride, plaque index, acid production, dental canes, man 7210.
- sodium fluoride, prophylaxis, dental caries, children 8890.
- sodium phylate, benzethonium chloride, effects on dental plaque formation, man 8989
- stannous fluoride, effects on *Streptococcus mutans* levels, dental plaque, saliva, man 3500.

Movaelactam,

- +amikacin, antibacterial activity, *Enterobacteriaceae* 1614.
- +aminoglycoside antibiotics, antibacterial activity, non-fermentative gram-negative bacteria 1607.
- antibacterial activity 4365.
- antibacterial activity 7139.
- antibacterial activity, anaerobic bacteria 5270.
- antibacterial activity, bacteria clinical isolates 2505.
- antibacterial activity, *Bacteroides fragilis* 7129.
- antibacterial activity comparison, antimicrobial agents 6126.
- antibacterial activity, *Enterobacteriaceae*, *Bacteroides fragilis*, *Pseudomonas aeruginosa* 5269.
- antibacterial activity, gram-negative bacilli 7983.
- antibacterial activity, gram-negative bacteria 1606.
- antibacterial activity, gram-negative bacteria 4362.
- antibacterial activity, gram-negative bacteria, gram-positive bacteria 5276.
- antibacterial activity, *Haemophilus influenzae* 2511.
- antibacterial activity, *Haemophilus influenzae*, gram-negative bacteria 6119.
- antibacterial activity, *Haemophilus influenzae*, inoculum size effects on 2532.
- antibacterial activity, *Pseudomonas aeruginosa* 6128.
- antibacterial activity, *Pseudomonas*, *Enterobacteriaceae* 4344.
- antibacterial activity, *Streptococcus pneumoniae* 727.
- antibiotic resistance, *Staphylococcus aureus* 5160.
- antibiotic sensitivity testing, anaerobic bacteria 7136.
- antibiotic sensitivity testing, antibacterial activity, antibiotic resistance, *Enterobacteriaceae* 5271.
- antibiotic sensitivity testing, disc-diffusion test, quality control 9745.
- bacteria antibiotic sensitivity testing 7984.
- comparison, cefmenoxime, cefotetan, N-formimidoyl thienamycin, anaerobic bacteria susceptibility 5194.
- comparison, cefotaxime, antibacterial activity, *Enterobacteriaceae* 6125.
- comparison, cefotetan antibacterial activity 6134.
- comparison, *Haemophilus influenzae*, temocillin antibacterial activity 6155.
- enantiomers, antibacterial activity, *Pseudomonas aeruginosa* 5274.
- ± gentamicin, bactericidal activity, antibiotic synergism, *Pseudomonas aeruginosa* 2530.
- hydrolysis susceptibility, β -lactamase, *Pseudomonas aeruginosa* 5272.
- inactivation aminoglycoside antibiotics 6108.
- induction β -lactamase, bacteria, comparison cephalosporins, cefoxitin 5273.
- β -lactamase inactivation 4673.
- structure-activity relationships, antibacterial activity 5275.

Mucicidin,

- biosynthesis, tryptophan nutrient requirements, *Qudemansiella mucida* 8015.
- Qudemansiella mucida*, biosynthesis, radioactive labelling 7187.

Mucin,

- Achatina fulica*, antibacterial activity, *Bacillus subtilis*, *Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa* 5185.

Mucinase,

- purification, characterization, *Vibrio cholerae* 963.

Mucoid form,

- Pseudomonas aeruginosa*, alginate biosynthesis 2746.

Mucor,

- antifungal activity, *Streptomyces leptomyces* A, *leptomycin B* 8028.
- chemicals, antifungal activity 3336.
- contamination, cigarettes, *Cannabis sativa* 8172.
- fructose production, use, sucrose, fructose syrup 8572.
- lipase, 1-acetoxy-2,3-dichloropropane, asymmetry hydrolysis 158.
- rhizosphere microorganisms, phytotoxins inhibition roots growth 4141.

Mucor circinelloides,

- gas production, yogurt, identification 4840.
- post-harvest decay, prunes 5801.

Mucor hiemalis,

- antifungal activity, tridemolol diastereoisomers 693.
- compactin hydroxylation, 3 α -hydroxycompactin biosynthesis 8872.
- glutathione peroxidase, purification, characterization 8300.

Mucor hiemalis, (continued)

- hydroxylation, monacolin K, compactin 7552.
- post-harvest decay, etiology, *Manihot esculenta* 3102.
- soil microorganisms, ethylene production, novobioin, cycloheximide, effects on 5907.

Mucor melhei,

- proteinase comparison, *Bacillus licheniformis* milk-clotting enzymes, biosynthesis, characterization, immobilization 4613.

Mucor mucedo,

- cell walls biosynthesis, association, dimorphism, fungicides effects on, factors affecting 4310.
- cell walls, glucuronans, physicochemical properties 6578.
- lipolysis, proteolytic enzymes, activity, temperature, effects on 5512.
- quinazolones antifungal activity 2476.
- ultrastructure, quinazone effects on 4124.

Mucor piriformis,

- pears post-harvest decay, antifungal activity, surfactants+chlorine 1323.

Mucor plumbeus,

- biodegradation, straw, role, soil, volcanic ash, stabilization 5091.
- gas production, yogurt, identification 4840.

Mucor pusillus,

- post-harvest decay, *Theobroma cacao* beans fermentation 8601.
- post-harvest decay, tobacco leaves, association storage 8599.
- proteinase, purification, biological properties 35.
- proteinase, purification, characterization 1874.

Mucor racemosus,

- antifungal activity, *Streptomyces leptomyces* A, *leptomycin B* 8028.
- milk-clotting enzymes, casein proteolysis 7357.
- milk-clotting enzymes, purification, characterization 7358.

Mucor rouxianus,

- antifungal activity, *Streptomyces leptomyces* A, *leptomycin B* 8028.

Mucor rouxii,

- 6-phosphofructokinase stimulation, fructose 2,6-bisphosphate role 9130.
- protein kinase, cyclic AMP binding, kinetics 6469.

Mucos,

- microorganisms, fixation methodology 3514.

Mulches,

- disease control, *Rhizoctonia solani*, web blight, *Phaseolus vulgaris* 5050.
- effects on pathogenicity, yield, *Verticillium wilt*, *Solanum melongena* 476.
- soil, poly(ethylene) effects on *Sclerotium oryzae* sclerotia 1513.

Multicollic acids,

- Penicillium multicolor*, sodium acetate incorporation, oxygen distribution 7287.

Multicollic acid,

- Penicillium multicolor*, sodium acetate incorporation, oxygen distribution 7287.

Mumps virus,

- immunoglobulin A, man, detection, enzyme-linked immunosorbent assay 3528.
- vaccines, immunogenicity, storage effects on 4429.

Mung bean mild mosaic virus,

- pathogenicity, *Rhizobium* inoculation, nitrogen fertilizers effects on, *Phaseolus aureus* 8534.

Mung bean yellow mosaic virus,

- Bermia tabac disease transmission, host range, purification, characterization, Thailand 6813.
- infection inhibition modulation, nitrogen fixation, *Vigna radiata* 1144.
- infection, *Vigna mungo*, disease resistance, genetic analysis 3137.

- disease resistance, plant breeding, *Phaseolus aureus* 446.

Muramic acid,

- Escherichia coli*, detection methodology, gas chromatography 7240.
- gas chromatography, indicators biomass, bacteria, sediments, estuaries 9027.
- high-performance liquid chromatography, bacteria biomass measuring techniques, sediments, manne environment 7252.

Muramoyl-ATP,

- lysis activity, use, differentiation, *Streptococcus* group A 3547.

Muramoyl-pentapeptide carboxypeptidase,

- amino acid sequence, *Streptomyces albus* 2788.

Murein,

- biosynthesis, colicin M effects on, *Escherichia coli* 2465.
- biosynthesis, cross-linking, *Escherichia coli* cell division 1984.

Murine leukemia virus,

- antiviral activity, fluorene substituted amino acids derivatives 8799.

Murine sarcoma virus,

- interferon, inhibition, replication 7113.

Mus musculus domesticus,

- vectors, spores, *Botryodiplodia theobroma*, yams, post-harvest decay 442.

Mus,

- leafspot, *Mycosphaerella muscicola*, triadimefon disease control 4127.

Musa paradisiaca,

- viruses, bunchy top, disease transmission, *Pentalonia nigronervosa* 7677.

Musa sapientum,

- Colletotrichum musae infection, appressoria, development 5733.
- disease transmission, banana mosaic virus, *Aphis gossypii* 3069.
- fungi crown rot, pathogenicity 395.
- Mycosphaerella muscicola* sigatoka 3969.

Mushroom poisoning,

- Amanita phalloides*, age effects on mortality, man 9280.
- Amanita phalloides*, man 178.
- Clitocybe pseudoinaria*, case reports, man 5804.
- Cortinarius speciosissimus*, renal failure, case reports, man 227.
- Cortinarius splendens*, man, case reports 4768.
- mushrooms nucleic acids levels, relationship 1961.
- Opheolatus olearius*, gastritis, man 7582.
- treatment, man 5612.

Mushrooms,

- canning, *Clostridium botulinum*, spores inactivation, heat transfer 1093.
- cultivation, cultivation techniques, reviews 5614.
- cultivation, technology, species use, USA, reviews 4825.
- food processing 5610.
- food spoilage, γ radiation, storage, effects on cytokinins 3816.
- nucleic acids levels, mushroom poisoning relationship 1961.
- relationship, appetite, animal models, man 3815.

Mustela vison,

- lung cells, media (selective), *Mycoplasma hyorhinus* 4491.

Mutants,

Botrytis cinerea, terpenoids conversion 5566.
food quality, yeasts culture effects on 1050.
production, analyzers 9234.
single-cell protein production, *Candida utilis* 5472.

Mutagenesis,

antifungal activity, 4 acetoxy-1,4-benzoxazin-3-one interaction DNA 4309.
Micromonospora rosaria, methodology, protoplasts, mycelia fragments 9075.
phase λ , γ radiation induction 1580.

Mutagenicity,

alfatoxin B1, detoxification, ammonium hydroxide, sodium hypochlorite, sodium hydroxide 278.
Lactarius necator, mutagens characterization 2916.
N-methyl-N-formyl hydrazine, *Gyromitra esculenta* gyromitrin metabolites, Ames test 6708.
toxicity, hydrazine derivatives, Basidiomycetes metabolism, *Salmonella typhimurium*, correlation, animals 1095.
Mutagenicity testing,
alfatoxin B1, α radiation treatment detoxification 3879.
bacteria, chemical pollution 1784.
chemical, *Neurospora* 8149.
Lactarius necator extracts 4715.
methodology, Ames test 845.
mycotoxins, *Fusarium* 2315.
Salmonella, methodology 9893.
Salmonella, strains 3560.

Mutagens,

intestinal microflora, rats, association, cytosin activation, genetic analysis 4510.

Lactarius necator, mutagenicity, characterization 2916.

Mutanolysin,

treatment *Streptococcus* protoplasts formation, dairy industry 5414.

Mutants,

antibiotic resistance, *Azotobacter vinelandii*, nitrogen fixation 9618.
antibiotic resistance genes, streptomycin, *Escherichia coli*, selection methodology 4481.
arginine, *Acinetobacter calcoaceticus*, ornithine, production 6389.
bacteria, cellulose biodegradation 165.
Aspergillus nidulans, chloronore resistance 5151.
Aspergillus parasiticus, anthraquinone bioaccumulation, column chromatography 5649.
autotrophy, *Bacillus licheniformis*, bacitracin production 6172.
autotrophy, *Rhizobium meliloti*, adenine nutrient requirements, nodulation, *Medicago sativa* 9616.
Bacillus subtilis, isosine biosynthesis, 5-nucleotidase use 122.
Bacillus subtilis, sporulation, rifamycin, antibiotic resistance 7901.
bacteria, isolation, methodology 9048.
Bifidobacterium bifidum, isolation, media (culture), methodology 8133.
Candida, ethanol production, oxygen uptake relationship 8398.
Candida rugosa, β -hydroxypropionic acid production 5474.
Candida rugosa, D-5-hydroxyisobutyric acid production 4583.
Clostridium perfringens, metronidazole drug resistance 3294.
depression, *Schwannomyces alivius*, starch hydrolysis 8452.
Erysiphe graminis f.sp. tritici, virulence, genetic analysis, powdery mildew, *Triticum aestivum* 356.
Escherichia coli, nitrofurantoin, drug resistance 3276.
Escherichia coli, typhochanase overproduction 9137.
fowl plague virus, ribavirin drug resistance 630.
herpes simplex virus 2, 9-(2-hydroxyethoxymethyl)guanine drug resistance, role, BSC-1 cells cell fusion 3271.
hormones, *Triticum aestivum*, yield, relationship, Azospirillum inoculation 5944.
Lycopodium esculentum, *Rhizopus stolonifer* infection, effects on, cellulase, pectinolytic enzymes 5773.
Micromonospora polytrita
20-deoxo-20-dihydro-12,13-deepoxy-12,13-dehydroasaranolide conversion 8908.
Micromonospora sagamiensis, gentamicin, sagamicin, biosynthesis, cobalt, regulation 6195.
Pachysolen tannophilus, acetic acid production 2733.
penicillin chrysogenum, penicillin production 6154.
radioreistance, *Bacillus subtilis*, *Bacillus thuringiensis* var. *galgaliae*, isolation, characterization 7027.
Rhizobium, Cicer anietinum, nodulation, nitrogenase activity, competition 7854.
Rhizobium japonicum, nitrogen fixation, photosynthesis, yield, Glycine max 9579.
Rhizobium trifolii, soil, nitrogen fixation, viability 2354.
Saccharomyces cerevisiae, mitochondria, ethanol production, aerobic conditions 3749.
Saccharomyces uvarum, ethanol tolerance, selection methodology 4520.
Saccharomyces lipolytica, proteinase, production, characterization 1921.
Streptococcus lactis, lactose fermentation, starter cultures, cheddar cheese production 7570.
Streptomyces cacaui, penicillins antibiotic resistance, role, penicillin-binding protein 3297.
Streptomyces coelicolor, *Streptomyces galilaeus*, anthracycline antibiotics biosynthesis 5540.
Streptomyces cremeus, auxotrophs, nebramycin biosynthesis, antibiotic resistance 6020.
Streptomyces fradiae, growth, cyclic AMP, relationship, tylosin, biosynthesis 4398.
Streptomyces galilaeus, anthracycline antibiotics biosynthesis, structure 5539.
Streptomyces galilaeus, anthracycline antibiotics, isolation, characterization 5538.
Streptomyces galilaeus, biosynthesis, anthracyclines, anthraquinones 2823.
Streptomyces griseoviridis, proline hydroxylation, viridigrisein analogs production 8911.
Thermomonospora curvata, cellulase biosynthesis 974.
transport 5, *Rhizobium meliloti*, *Medicago sativa*, nodules, ultrastructure 7848.
varcinia virus, drug resistance, 2-O-methyladenosine 8739.
yeasts, insertion, nucleotides, methodology 1808.
Yersinia pestis, polymyxin, antibiotic sensitivity testing 6174.

Mutation,

Agrobacterium, agrocin resistant mutant, mutation 2417.
Corynebacterium diphtheriae, association, iron effects on toxins production 3889.
effects on genes regulation, *Escherichia coli* methionine biosynthesis 7481.
herpes simplex virus, genes, thymidine kinase, DNA polymerase, drug resistance, 9-(2-hydroxyethoxymethyl)guanine 7874.
lactic acid bacteria, stimulation aroma compounds production 7474.

Mutation, (continued)

Salmonella typhimurium concentration effects on, Ames test 9023.
Streptomyces bikiniensis, N-methyl-N-nitro-N-nitrosoguanidine induction, effects on streptomycin biosynthesis, antibiotic resistance 5256.
Mutton,
Issues damage, bacteria contamination, organoleptic evaluation 181.
Mutualism,
Cytophaga, Zoogloea, activated sludge 3463.
interspecific relationships, mycorrhizas, *Rhizobium*, Leguminosae 9555.
Mycela,
Abidia corymbifera, morphology, liquid culture, mixing, rheology 9069.
Agaricus bisporus, chitin synthase isolation, characterization 4624.
Agaricus bisporus, growth, relationship, cellulase biosynthesis 6559.
Basidiomycetes, chitin assays 4517.
Basidiomycetes, extracts, hemagglutination 13.
Basidiomycetes, growth, soil, association, plants 1478.
breakage methodology, *Neurospora*, mitochondria, vacuoles isolation 4536.
Cryphonectria cubensis, *Eucalyptus phenols* effects on, role, disease resistance, cancer 5814.
Dactylium dendroides, protoplasts release, culture systems 9074.
fragments, methodology, *Micromonospora rosaria* mutagenesis 9075.
fucomannoproteins, mannoproteins, characterization, *Abidia cylindrospora* 7295.
fungi, fermenters, sampling equipment 9080.
fungi, leaf litter decomposition, *Colombola* grazing effects on, nitrogen, cations leaching 3212.
fungi, p-aminobenzoic acid concentration, relationship levorin biosynthesis 7171.
fungi, penetration, pores, Glycine max, seeds 321.
growth, *Streptomyces nodosus*, amphotericin B biosynthesis 6181.
homogenates preparation, methodology 9072.
infectivity, forests soil effects on *Phytophthora* 1483.
isolation, glucose isomerase, methodology, *Streptomyces albobisporus* 18.
organic matter, soil treatment, nitrogen mineralization 5949.
Penicillium chrysogenum, mannitol dehydrogenase purification, characterization, industrial wastes isolates 5514.
Penicillium chrysogenum, morphology, association, beads 9985.
Penicillium digitatum, biomass use, solution uranium removal 9628.
Phymatobolus omnivorum, antifungal activity, ammonia 696.
Phytophthora infestans, lipoglycoproteins, effects on *Solanum tuberosum* tubers ultrastructure 2257.
role, corrosion, role, *Cladosporium resinae* 169.
Streptomyces cinereus, cinropeptin isolation, physicochemical properties 6236.
streptomycin, immobilized cells, production, tylosin, nikomycin 1685.
Streptomyces longispororuber, corralomycin isolation 7160.
Streptomyces, mystatin extraction, dimethyl sulfoxide use 8869.
yeasts, dimorphism, assays methodology 9082.
Mycelophthora thermophila,
infection, *Canarium schweinfurthii*, bark 550.
Mycelium radialis atrovirens,
infection, *Pseudotsuga menziesii* roots, incidence 4162.
Mycelinamides,
components, *Micromonospora griseorubra*, physicochemical properties 6204.
Mycinolide IV,
stereochemistry, X-ray crystallography 1652.
Mycobacillin,
purification, *Bacillus subtilis* 787.
Mycobacterium,
antibacterial activity, antibiotic OA-7653 7179.
antibacterial activity, glutaraldehydes based disinfectants, evaluation, dialysis systems 7207.
antibacterial activity, halogenofur compounds 2438.
antibiotic sensitivity testing, cephalosporins 7996.
antimycobacterial activity, rifampicin, cyclopropyl rifamycin 2419.
antimycobacterial activity, sulfonamides, cotrimoxazole 2420.
biodegradation, phospholipids, triacylglycerols, cholesterol 2881.
dapson, drug sensitivity testing 2467.
detection, media (selective), radiometry 9933.
detection, radiometry 9926.
disinfection, ionizing radiation, drinking water 2500.
drinking water disinfection, ionizing radiation 3487.
drug sensitivity testing 679.
drug sensitivity testing, tissue culture media 7911.
esterase, Tween 80 hydrolysis, purification, physicochemical properties 8259.
ethambutol analogs antibacterial activity, association, tuberculosis treatment 5188.
fatty acids metabolism, measuring techniques, radiometry 837.
fructose-bisphosphate aldolase, purification, characterization 6430.
galactokinase, purification, characterization 5498.
identification 3603.
identification methodology 3607.
identification, tuberculoesterase acid, mycoseric acid, detection 6326.
immobilization methodology 8127.
immobilized cells, ethylene oxide production, bioreactors 3262.
infection, trimethoprim, sulfamethoxazole, cotrimoxazole, in vitro antibacterial activity 6034.
isolation, *Nocardia* like, soil, *Zaire* 3193.
isolation, sewage sludge 6248.
media (culture), differential diagnosis 2704.
media (selective) 4503.
storage, freezing, freeze-drying 1800.
strains, identification, use, bleomycin sensitivity 671.
tuberculosis, clinical isolates, antibiotic resistance, antitubercular agents 8747.
Mycobacterium aurum,
isoniazid, serum levels, bioassays 2421.
Mycobacterium avium,
antitubercular agents +2-acetylpyridine, +2-acetylquinoline, antibacterial activity 3310.
nitrogen sources, ammonium, continuous culture methodology 8114.
Mycobacterium avium-intracellulare,
antibiotic sensitivity testing, cephalosporins 7996.
antimycobacterial activity, dimethyl sulfoxide, +antimycobacterial agents 2401.
biocorrosion, sulfamethoxazole, cotrimoxazole, 7912.
infection, trimethoprim, sulfamethoxazole, cotrimoxazole, in vitro antibacterial activity 6034.
Mycobacterium tuberculosis, animal isolates, differentiation methodology, association ions monitoring 4496.

- Mycobacterium bovis**,
acyl-CoA carboxylase, purification, characterization 96.
cytoplasm extracts, characterization, antitumor activity 7450.
immunogenicity, use vaccines 2601.
media (culture), differential diagnosis 2704.
media (isolation), animal isolates 1792.
- Mycobacterium chelonae**,
antibiotic sensitivity testing, drug sensitivity testing, sulfonamides, agar
diffusion test 9657.
- Mycobacterium chelonae**,
biodegradation, petroleum, hydrocarbons 7869.
- Mycobacterium flavescens**,
biodegradation, petroleum, hydrocarbons 7869.
- Mycobacterium fortuitum**,
antibacterial activity, cephamycin 1615.
antibiotic sensitivity testing, cephalosporins 7996.
antibiotic sensitivity testing, cephalothin + clavulanic acid,
amoxicillin + clavulanic acid 7141.
antibiotic sensitivity testing, drug sensitivity testing, sulfonamides, agar
diffusion test 9657.
biodegradation, petroleum, hydrocarbons 7869
cefuroxime, antibacterial activity 1612.
drinking water disinfection, ionizing radiation 3487.
fortuitum, conformation, N.M.R. 6391.
infection, trimethoprim, sulfamethoxazole, cotrimoxazole, in vitro antibacterial
activity 6034.
- Mycobacterium gastri**,
dapsonide drug sensitivity testing 2467.
- Mycobacterium goodii**,
dapsonide drug sensitivity testing 2467.
drinking water disinfection, ionizing radiation 3487.
- Mycobacterium intracellulare**,
antibiotic resistance, association, membrane permeability 7047.
antibiotic synergism, antibacterial activity 3309.
antitubercular agents + 2-acetylpyridine, + 2-acetylquinoline, antibacterial
activity 3310.
infection, monkeys, clinical aspects, drug sensitivity testing 4285.
- Mycobacterium kansasii**,
antibiotic sensitivity testing, cephalosporins 7996.
antitubercular agents + 2-acetylpyridine, + 2-acetylquinoline, antibacterial
activity 3310.
dapsonide drug sensitivity testing 2467.
drinking water disinfection, ionizing radiation 3487.
infection, trimethoprim, sulfamethoxazole, cotrimoxazole, in vitro antibacterial
activity 6034.
- Mycobacterium leprae**,
antibacterial activity, rifampicin 3419.
culture, in vitro 1778.
dapsonide drug sensitivity testing 2467.
drug sensitivity testing, radioactive labelling, in vitro, macrophages 9659.
leprosy, epidemiology, radioimmunoassay, man 848.
leprosy, immunoassays, epidemiology, man 846.
leprosy, subclinical infection detection, fluorescent antibody test, man 847.
rifampicin antibacterial activity, radioactive labelling, infected macrophages,
in vitro 9658.
- Mycobacterium lepraemurium**,
cell culture, use, cycloheximide 9034.
drug sensitivity testing, antibacterial agents 2466.
- Mycobacterium marinum**,
antibiotic sensitivity testing, drug sensitivity testing, sulfonamides, agar
diffusion test 9657.
infection, trimethoprim, sulfamethoxazole, cotrimoxazole, in vitro antibacterial
activity 6034.
- Mycobacterium paratuberculosis**,
mycobactin, chemical composition 1848.
mycobactin J production, purification, biological activity 2847.
- Mycobacterium phlei**,
menaquinone biosynthesis, precursors, enzymes, genetic control, reviews 6628.
- Mycobacterium scrofulaceum**,
antibiotic sensitivity testing, cephalosporins 7996.
infection, trimethoprim, sulfamethoxazole, cotrimoxazole, in vitro antibacterial
activity 6034.
- Mycobacterium smitiae**,
antitubercular agents + 2-acetylpyridine, + 2-acetylquinoline, antibacterial
activity 3310.
- Mycobacterium smegmatis**,
antibacterial activity, derivatives, kanamycin, dibekacin, ribostamycin 8853.
arabinomannan, use, enzyme-linked immunosorbent assay, diagnosis, leprosy, man
6326.
auxotrophs isolation, use vancomycin 8134.
biodegradation, petroleum, hydrocarbons 7869.
continuous culture, phage typing, survival, use phase D-29, phage MyF2 P/59 9010.
esterase, hydrolysis, polyoxyethylene sorbitan monooleate, purification,
characterization 8265.
fatty acid synthetase multienzyme complexes, purification, characterization 924.
ferredoxin, purification, physicochemical properties 3654.
 β -lactamase, purification, characterization 3690.
lactate 2-monooxygenase reconstitution flavin derivatives, oxidation
decarboxylation lactic acid 6502.
mycobactin, production, methodology 117.
resistance, growth, RNA biosynthesis, rifampicin effects on 7156.
ribose isomerase, purification, characterization 4652.
spheroplasts, isolation, methodology 856.
thioesterase I, purification, characterization 8220.
- Mycobacterium szulgai**,
dapsonide drug sensitivity testing 2467.
- Mycobacterium tuberculosis**,
acyl-CoA carboxylase, purification, characterization 96.
amikacin antibacterial activity 2454.
antibacterial activity, amoxicillin + clavulanic acid antibiotic synergism 8845.
antitubercular agents, drug sensitivity testing 2422.
antitubercular agents, + 2-acetylpyridine, + 2-acetylquinoline, antibacterial
activity 3310.
cefuroxime, antibacterial activity 1612.
clinical isolates, drug resistance, Korea Rep. 9656.
drug resistance, pyrazinamide, pyrazinamidase assays 9638.
- Mycobacterium tuberculosis**, (continued)
drug sensitivity testing, tissue culture media 7911.
 β -D-glucuronidase inhibitors, purification, characterization 8260.
liquid culture 9018.
lysolectin, antibacterial activity, association, fatty acid composition 4286.
malonyl-CoA decarboxylase, purification, characterization 8245.
media (culture), differential diagnosis 2704.
minocycline, antitubercular agents 8898.
Mycobacterium avium-intracellulare, animal isolates, differentiation methodology,
association ions monitoring 4496.
proteins, biosynthesis, characterization, association tuberculin activity 6384.
swabs culture methodology 869.
- Mycobacterium ulcerans**,
dapsonide drug sensitivity testing 2467.
- Mycobacterium xenopi**,
gastroenteritis, water-borne diseases, man, drinking water 2633.
- Mycobactin**,
Mycobacterium paratuberculosis, chemical composition 1848.
Mycobacterium smegmatis, production, methodology 117.
- Mycobactin J**,
Mycobacterium paratuberculosis, production, purification, biological activity
2847.
- Mycogone permiciosa**,
wet bubble disease, prochloraz, disease control, Basidiomycetes 6824.
- Mycogone perniciosa**,
Basidiomycetes pathogens, resistance, antifungal agents 5826.
infection, Agarcus, prochloraz, disease control 4118.
- Mycoplectidiscus terrestris**,
disease control, benomyl foliar applications, metham fumigation, Glycine max
5060.
- Mycophagy**,
ameba, Gaumannomyces graminis, take-all, crop fields 5920.
- Mycophenolic acid**,
biosynthesis, Penicillium roqueforti, strains specificity 982.
- Mycoplanes A**,
structure, Actinoplanes awajinensis subsp. mycoplanecinus 9766.
- Mycoplanecinus**,
biosynthesis, Actinoplanes awajinensis subsp. mycoplanecinus, new taxa, taxonomy
9789.
isolation, physicochemical properties, Actinoplanes awajinensis
subsp. mycoplanecinus 9790.
- Mycoplasma**,
agglutination tests, methodology 2648.
antibacterial activity, antibiotic M-92 3428.
antibiotic sensitivity testing 2518.
antibiotic sensitivity testing 7973.
contamination, viruses culture collections, fluorescent probes detection 6293.
detection, cell culture, methodology, sensitivity 1770.
detection methodology, cell culture 9869.
X disease, prunus persica, oxytetracycline hydrochloride treatment 2152
dwarf disease, Morus, cytology 9375.
growth, colonies diameter, statistical analysis 8109.
infection, callus culture, Solanum melongena 1302.
infection, plants, tetracyclines treatment 5840.
lincomycin media (selective) 7233.
media (culture) methodology 8142.
ofloxacin antibacterial activity 3311.
plant diseases, antibiotics treatment, technology 5839.
plant diseases, electron microscopy, reviews 9316.
- Mycoplasma arginini**,
biosynthesis, ATP, AMP, ADP 9220.
- Mycoplasma bovis**,
biosynthesis, ATP, AMP, ADP 9220.
- Mycoplasma capricolum**,
protein composition 929.
- Mycoplasma fermentans**,
biosynthesis, ATP, AMP, ADP 9220.
- Mycoplasma gallisepticum**,
biosynthesis, ATP, AMP, ADP 9220.
cell membranes, purification methodology 3554.
inhibitors, detection, trachea washings, chickens 6302.
- Mycoplasma hyorhinis**,
detection, tissue culture, methodology 2690.
isolation, culture, atmospheric conditions effects on 8147.
- Mustela vison lung cells**, media (selective) 4491.
- Mycoplasma hyosynoviae**,
media (culture), anaerobic conditions, growth 2668.
- Mycoplasma mycoides**,
antibacterial activity, rubromycin, carminomycin, N-monoethyl derivatives 781.
- Mycoplasma pneumoniae**,
antibiotic sensitivity testing companion, rosaramycin, erythromycin,
tetracycline, spectinomycin 6092.
antibodies, detection, solid phase methods radioimmunoassay 9870.
media (isolation) 9872.
ofloxacin antibacterial activity 3311.
- Mycoplasma-like organisms**,
detection, roots, Catharanthus roseus 3054.
digitonin effects on, virulence, tissue culture, Nicotiana tabacum 2175.
X disease, mixed infection, Spiroplasma citri, etiology, Prunus 3025.
disease transmission, citrus 3970.
disease transmission, Euscelus obsoletus, Macrosteles sexnotatus 9399.
infection, Cocos nucifera, etiology, Tanzania 3972.
infection, Cocos nucifera, pathogenesis, tissues distribution 8566.
infection, diagnosis, ornamental plants 2185.
infection, Limonium sinuatum 5750.
infection, Oxalis tuberosa, incidence, Bolivia 433.
infection, rooting, cuttings, Catharanthus roseus 1310.
infection, trees, antibiotics treatment 5859.
isolation, sap, yellows, Cocos nucifera 1205.
isolation, yellows, Vitis vinifera 5024.
overwintering, rhizomes, Rubus idaeus, Cirsium arvense 6816.
phyllody, disease transmission, Deltocephalus flavicosta, Catharanthus roseus
7694.
plant diseases, vectors, insects 1120.
proliferation disease, Malus, tetracycline treatment 3023.

Mycoplasma-like organisms. (continued)

- raton stunt, *Cynodon dactylon*, etiology 3009.
stunt, diagnosis, fluorescence, *Apium* 2166.
stunt, disease transmission, *Allygus mayri* vectors, *Rubus* 2169.
stunt, *Vaccinium corymbosum* 5010.
stunt, vectors, *Philaenus spumarius*, *Rubus* 3057.
white leaf disease, *Cynodon dactylon*, tiamulin treatment 510.
wilt, *Cocos nucifera*, pathogenesis 8567.
witches broom incidence, *Cajanus cajan*, USA, Florida, association, rhabdovirus infection 4945.
witches' broom, *Ipomoea batatas*, disease transmission, *Orosius lophogorum* *ryukyensis*, Solomon I. 9424.
witches' broom, outbreaks, *Rosa* 5786.
yellowing, roots symptoms, *Cocos nucifera*, Jamaica 2228.
yellows, antigens, detection, enzyme-linked immunosorbent assay, immunoelectron microscopy, *Callitrophe chinensis* 5597.
yellows, *Cocos nucifera*, new records, Mexico 7678.
yellows, *Cocos nucifera*, phloem sap, collection, characterization 388.
yellows, *Cocos nucifera*, phloem sap, composition 387.
yellows, disease transmission, vectors, *Deltoccephalus flavicosta*, *Cocos* 1210.
yellows, effects on stomata, *Ulmus* 3171.
yellows, oxytetracycline, disease control, *Cocos nucifera* 1206.
yellows, sap, chemical composition, *Cocos nucifera* 1206.
yellows, vectors, *Cicadellidae* 9398.
- Mycoplasmatelae**,
biosynthesis, ATP, AMP, ADP 9220.
pathogenicity, plants, conferences 6363.
- Mycoplasmatelae virus-laidlawi**,
DNA replicative intermediates biosynthesis, chloramphenicol effects on 1625.

Mycorrhizas

- Abies alba* forests regeneration 534.
Allium cepa, effects on growth 586.
Arctostaphylos manzanita, *Arbutus menziesii*, *Arctostaphylos uva-ursi* 6962.
association *Adelges*, *Boreira reticulata* 1472.
biodegradation, wood, use, inoculum, *Tsuga heterophylla* 529.
biomass, association, roots, *Vicia faba* 553.
biomass, tundra, sub-alpine environments 5883.
Centococcus geophilum, formation, *Tsuga heterophylla* seedlings, USA, Oregon 6912.
competition, interspecific relationships, *Glomus*, *Zea mays*, *Allium* 5894.
development, *Eucalyptus st-johnii* seedlings 4208.
development, *Monotropa hypopitys*, ultrastructure 2328.
ecophysiology, nutrient transport, absorption, nitrogen sources, phosphate, *Eucalis* 8538.
effects on, growth, *Picea sitchensis*, *Picea glauca* 530.
effects on, *Sophora secundiflora*, seedlings growth, phosphorus uptake 583.
Eichhornia crassipes 4222.
Fagus, granules, phosphorus levels, calcium levels 6973.
forests soil nitrogen mineralization 523.
formation, seedlings growth, soil properties 522.
formation, *Vaccinium*, media (culture) effects on 6970.
fungi, host specificity, *Eucalyptus*, *Pinus radiata*, *Pinaceae* 5901.
Gigaspora margarita, hydroponics culture, *Trifolium repens* 2716.
Glomus etunicatum, stimulation, phosphorus uptake, drought tolerance, *Allium cepa* 4200.
Glomus fasciculatum, growth, nutrient status, nitrogen, phosphorus, *Bouteloua gracilis* 1485.
Glomus mosseae, infection monitoring, chitin, mannans, levels, *Allium cepa* 3170.
goodyera repens, roots, symbiosis, *Rhizoctonia goodyerae-repentis* 4201.
growth rate, *Pinus tinctus*, *Eucalyptus st-johnii* 6950.
incidence, *Rhizodendron*, greenhouses, USA, Rhode Island 4202.
inoculum-3-acetic acid, *Pinus tinctus*, gas chromatography 8171.
infect ultrastructure, cytology, host plants 9536.
inoculation, growth, survival, seedlings, *Pseudotsuga menziesii* 518.
inoculation, revegetation, mines, *Coniferales* 519.
inoculation, *Vaccinium corymbosum*, association, soil pH 475.
interspecific relationships, mutualism, *Rhizobium*, *Leguminosae* 9555.
Mimosa caesalpinii, characterization 5899.
nitrogen cycle, grazing, fertilization, *Panicum coloratum* 1484.
nitrogen fertilization population dens., *Pinus sylvestris* 3163.
nutrient cycles, biomass, stands, *Pseudotsuga menziesii*, USA, Oregon 6905.
nutrient uptake, conferences 10005.
phosphate, cations uptake, roots, *Trifolium subterraneum* 559.
phosphorus nutrient sources, seedlings, *Thelophora terrestris*, *Picea sitchensis* 1441.
Pinus betula, *Thelophora terrestris*, India 2303.
Pinus radiata, *Pseudotsuga menziesii*, *Eucalyptus*, *Nothofagus*, *Leptospermum*, New Zealand 7774.
Pinus taeda, soil amendment, land reclamation, mines, revegetation 2302.
role, trees cultivation, reviews 7780.
seasonal variations, nutrient status, *Gramineae* 1490.
soil, fertilizer applications effects on, nutrient deficiency, *Pinus* 7775.
soils (loam) radiation, temperature, effects on survival 1481.
species composition, *Eucalyptus* 1440.
species composition, soil properties effects on, *Pseudotsuga menziesii*, *Tsuga heterophylla* 520.
symbiosis, *Arbutus menziesii*, *Arctostaphylos manzanita*, USA, California 4196.
symbiosis, *Cymbidium*, *Cattleya*, greenhouses 9562.
symbiosis, silviculture 2304.
symbiosis, trees, screening 3162.
symbiosis, trees, shrubs, Tanzania forests 2296.
symbiosis, *Trifolium subterraneum*, effects on nitrate reductase (NADH) 6997.
Trifolium repens, Brassica effects on growth 585.
Trifolium repens, roots colonization, seasonal variations 554.
utilization, carbon sources, photosynthesis, *Vicia faba*, relationship *Rhizobium* 515.
Vaccinium ashei, USA, Florida, factors affecting 4192.
Vitis vinifera, methyl bromide soil fumigation effects on, relationship, stunt 5987.
- Mycoseric acid**,
detection, *Mycobacterium* identification 6326.
- Mycosphaerella citri**,
acaricides, antifungal activity 9497.
greasy spot, *Citrus latifolia*, epidemiology, USA, Florida 9376.
greasy spot, *Citrus paridis*, disease control, fungicides, foliar applications 5834.
- Mycosphaerella cryptica**,
leafspot, *Eucalyptus*, New Zealand 7706.
- Mycosphaerella laricina**,
needlecast, *Larix decidua*, new records, USA 9527.
- Mycosphaerella melonis**,
infection susceptibility, *Cucumis*, *Cucurbita* 7709.
stem blight, *Cucumis*, epidemiology, relationship, powdery mildew, pest attack 1248.
- Mycosphaerella musicola**,
leafspot, triadimefon disease control, *Musa* 4127.
spatiotax, *Musa sapientum* 3969.
- Mycosphaerella rubiicola**,
leafspot, *Eucalyptus*, New Zealand 7706.
- Mycosphaerella pinodes**,
infection, *Pisum sativum*, *Ascochyta fabae* effects on disease resistance 480.
seed-borne diseases, *Pisum sativum*, detection 6732.
- Mycosphaerella pomi**,
fruit rot, disease control, fungicides, *Malus pumila* 1392.
- Mycosporins**,
Glomerella, structure 3728.
- Mycotoxins**,
animals, feeds contamination, mycotoxins, conferences 5455.
domestic animals, mycotoxins contamination, feeds 9292.
pigs 4895.
- Mycotoxins**,
agricultural practices, soil microorganisms, conferences 6368.
alkaloids, *Penicillium crustosum* production, beer contamination 8503.
Aspergillus fumigatus, contamination, bread, food poisoning, man, neurological complications 2947.
Baccharis cordifolia, uptake, poisoning, cattle 2944.
bioassays, fungi, screening methodology 3873.
biosynthesis, *Fusarium graminearum*, grains substrates 8511.
cereals, food contamination, reviews 1099.
contamination, animals feeds, conferences 5455.
contamination, association feeds hygiene 4889.
contamination, corn 5643.
contamination, feeds 3868.
contamination, feeds, high-performance liquid chromatography 4893.
contamination, *Gramineae* 5651.
contamination, *Sorghum bicolor* 6703.
feeds contamination, mycotoxicosis, domestic animals 9292.
food contamination, animals feeds, fungicides use control 3865.
food contamination, control programs, standards 6694.
food contamination, flour 277.
food contamination, incidence, British Isles 3878.
fungi, biosynthesis, environmental factors effects on 284.
fungi, detection, bioassays, food 2939.
fungi, feeds contamination, cattle sterility 4890.
fungi, *Mycrocladium*, binding dehydrogenase active sites, *Saccharomyces cerevisiae* 7625.
Fusarium, toxicity testing, mutagenicity testing, role dieback 2315.
grain dust, grain elevators 7619.
hydrazine derivatives, *Basidiomycetes* metabolism, toxicity, mutagenicity, *Salmonella typhimurium*, correlation, animals 1095.
isolation, separation, methodology, *Aspergillus terreus* 286.
mycotoxicosis, pigs 4895.
phomopsis, *Phomopsis leptostromiformis*, radioactive labelling 3869.
pretreatment, *Drosophila melanogaster*, effects on aflatoxin B1 toxicity 7617.
production, fungi, silage 4892.
production fungi, spoilage, corn, storage 2069.
secalonic acid D, corn dust 279.
sporadic diseases, toxicity, role superoxide radicals formation, in vitro 274.
Stachybotrys atra, toxicity, sheep, isolation, bedding straw 4897.
thin-layer chromatography, use, chromatographic acid 6697.
trichothene, densitometry 287.
- Mycotrienin I**,
biosynthesis, structure, *Streptomyces* 4424.
- Mycotrienin II**,
biosynthesis, structure, *Streptomyces* 4424.
- Mycotrienins**,
Streptomyces rishniensis biosynthesis, physicochemical properties 2827.
Streptomyces rishniensis biosynthesis, structure 2828.
structure 2829.
- Myeloma**,
proteins monoclonal antibodies, use, enzyme immunoassay, detection, *Salmonella*, methodology 7241.
- Myeloperoxidase**,
association, oxygen, susceptibility, *Legionella pneumophila* 2429.
- Myo-inositol-1-phosphate synthase**,
purification, characterization, *Neurospora crassa* 78.
- Myoecidium hortense**,
Cucumber mosaic virus infection, new records 3035.
- Myrica cerifera**,
understory, nitrogen fixation, *Pinus eliottii*, plantations 5853.
- Myrica gale**,
nitrogen fixation roots nodules, oxygen concentration 7859.
- Myricocum**,
biodegradation, cellulose 5594.
- Myrothecium**,
cellulase, cellulose, hydrolysis 7426.
cellulose biosynthesis 3668.
mycotoxins, binding dehydrogenase active sites, *Saccharomyces cerevisiae* 7625.
- Myrothecium indicum**,
cellulose hydrolysis, amino acids, carbohydrates effects on 7547.
- Myrothecium roridum**,
leafspot, ornamental plants 5747.
root rot, *Medicago sativa*, *Trifolium temense* 9329.
- Myrothecium verrucaria**,
16-hydroxytrichoderma dieneolids, isolation 6222.
root rot, *Medicago sativa*, *Trifolium temense* 9329.
single-cell protein, production, straw, *Triticum* 1084.
soil, herbicides effects on 8707.
- Mytilus edulis**,
microorganisms, biodegradation, metabolites, sterols 7554.
- Myxalamide**,
Xylococcus xanthus, purification, structure 8880.

- Mycobacter**, survival: *Micrococcus luteus*, host-parasite interactions 9569.
- Mycobacteriales**, pure culture, use antibiotics 7257.
- Mycococcus coralioideus**, pigments, purification, antimicrobial activity 9667.
- Mycococcus fulvus**, myxovalargin, biosynthesis, isolation, antibacterial activity 4412.
- pyrothrin, production, physicochemical properties 1653.
- Mycococcus virescens**, myxovirescins, antibacterial activity 3433.
- Mycococcus xanthus**, cell division, inhibition, mecillinam 752.
- myxalamide, purification, structure 8680.
- Myxomatosis**, biological control, *Oryctolagus cuniculus* 6623.
- Myxovalargin**, *Mycococcus fulvus* biosynthesis, isolation, antibacterial activity 4412.
- Myxovirecins**, antibacterial activity 3433.
- Myzus persicae**, alarm pheromone derivatives, effects on disease transmission, beet yellows virus, potato virus Y 3108.
- disease transmission, pea enation mosaic virus, bean yellow mosaic virus, *Pisum sativum* 2101.
- disease transmission, potato leaf roll virus, leaves age, *Solanum tuberosum* 2182.
- disease transmission, potato leaf roll virus, storage conditions, potatoes 7720.
- potato leaf roll virus, disease transmission, feeding behavior, permethrin, deltamethrin effects on 8526.
- vectors, disease transmission, beet mid yellowing virus, potato virus Y, beet yellows virus, deltamethrin, Rhizopus casei 467.
- vectors, disease transmission, potato virus Y, plant disease 9400.
- vectors, potato virus Y, detection, enzyme-linked immunosorbent assay 3517.
- vectors, viruses, plant diseases, disease control, repellents 459.
- N.M.R.**, acetic acid, association, penitrem A, biosynthesis, *Penicillium crustosum* 6700.
- acetic acid, sterigmatocystin, biosynthesis, *Aspergillus versicolor* 6699.
- alameithon structure 8036
- albomycin 81, albomycin 82, albomycin ϵ structure, *Streptomyces* 2573.
- antibiotic LL-BM123, antibiotic LL-BM782 4400.
- antibiotic LL-BM123, antibiotic LL-BM782 5265.
- azurin, *Alcaligenes faecalis* 920.
- chaetoglobosins, *Chaetomium globosum* 7454.
- characterization, antibiotics biosynthesis, methodology, reviews 7988.
- citratozymine A, citratozymine B structure, *Streptomyces citratus* 764.
- cytochrome c subunit association, *Rhodospirillum rubrum* 7296.
- cytochrome c heme iron coordination geometry, *Saccharomyces cerevisiae*, *Candida krusei* 3643.
- cytochrome c551 multiple forms, heme iron coordination geometry, *Rhodopseudomonas gelatinosa* 3653.
- elaphin structure, *Streptomyces* 3730.
- endonuclease calcium deoxynucleotides inhibitors complex conformation, *Staphylococcus aureus* 7395.
- enolase substrates binding, metals effects on, yeasts 6544.
- flavodoxin, riboflavin 5'-phosphate mobility, *Megasphaera elsdenii* 7302.
- formyltetrahydrofolate synthetase interaction, formic acid, methylammonium, *Clostridium cylindrosporium* 2803.
- fortuin conformation, *Mycobacterium fortuitum* 6391.
- Haemophilus influenzae, polysaccharides, capsules 7438.
- Helminthosporium carbonum cyclic peptides toxins, conformation 7618.
- irumaycin, structure 5279.
- iturin A structure, *Bacillus* 9774.
- kinetics, glycerophosphate acyltransferase, reconstitution, phospholipids vesicles 3703.
- magnesium, interaction, acetyl-CoA carboxylase biotin binding, *Escherichia coli* 4632.
- malonomycin 4405.
- malonomycin, *Streptomyces rimosus* var. *paramomycinus* biosynthesis 4406.
- peptidoglycans, *Brevibacterium divaricatum* 7441.
- proteinase inhibitor, *Streptomyces nigrescens* 7306.
- Pseudomonas aeruginosa*, cytochrome oxidase, magnetic susceptibility 2777.
- pyridoxal 5'-phosphate binding tryptophan synthase, *Escherichia coli* 4628.
- rhannose, *Streptococcus* group A 7436.
- ribosomal protein L29, ribosomal protein L30 tertiary structure, *Escherichia coli* 1838.
- ribosomal proteins, ribosomal subunit 50S, *Escherichia coli* 7298.
- soil microorganisms, acetic acid decomposition 8664.
- structure, bottomycin A2 9779.
- structure, glycoproteins, antibiotic A35512B, *Streptomyces candidus* 8027.
- structure, thioester, streptomycins 8913.
- subtilisin inhibitor, *Streptomyces* 4587.
- thymidylate synthase, *Lactobacillus casei* 2759.
- use, austin metabolites structure, *Aspergillus* ustus, *Aspergillus varicolor*, *Penicillium diversum* 4898.
- N,N'-Bis(alkylmethyl)-1,2-ethanediamine dioxides**, antifungal activity, antibacterial activity, structure-activity relationships, *Candida albicans*, *Escherichia coli*, *Staphylococcus aureus* 7954.
- N,N'-Bis(alkylmethyl)-1,2-propylenediamine dioxides**, antifungal activity, antibacterial activity, structure-activity relationships, *Candida albicans*, *Escherichia coli*, *Staphylococcus aureus* 7954.
- N,N'-Bis(decylmethyl)- α,ω -alkanediamine dioxides**, antimicrobial activity 7116.
- N,N'-Dicyclohexylcarbamidomide**, adenosinetriphosphatase binding subunits, purification, characterization, cell membranes, *Bacillus subtilis* 2833.
- Na-Palmitoyl-L-Lysyl-L-Lysine-ethyl ester dihydrochloride**, role, aflatoxins biosynthesis inhibition, *Aspergillus parasiticus* 9290.
- NAD(P)⁺ nucleosidase**, biosynthesis, *Streptomyces griseus*, methanol, ethanol, effects on 2797.
- Saccharomyces cerevisiae*, purification, characterization 6528.
- NAD(P)⁺ transhydrogenase**, quaternary structure, subunit association, *Azotobacter vinelandii* 60.
- NAD**, biosynthesis, association, nucleosides, *Salmonella typhimurium* 1962.
- regeneration systems, bacteria formate dehydrogenase use 4686.
- NAD⁺**, analogs inactivation alcohol dehydrogenase, yeasts 4627.
- binding glyceraldehyde-phosphate dehydrogenase, *Bacillus stearothermophilus* 6475.
- NAD⁺ kinase**, purification, characterization, *Candida utilis* 62.
- NADH**, generation, formate dehydrogenase role, methane monooxygenase epoxidation alkenes, *Methylophilus* 6474.
- regeneration, *Saccharomyces cerevisiae* immobilized cells, alcohol dehydrogenase 4601.
- regeneration, use, *Alcaligenes eutrophus* hydrogen dehydrogenase + lactate dehydrogenase, immobilized enzymes 8314.
- NADH dehydrogenase**, catalysis, daunomycin, aclacinomycin A reduction, *Vibrio harveyi* 4633.
- isozymes, isolation, characterization, cell membranes, *Micrococcus luteus* 7348.
- purification, characterization, membrane vesicles, *Bacillus subtilis* 966.
- purification, characterization, *Saccharomyces cerevisiae* 952.
- purification, characterization, *Thermus aquaticus* 4618.
- NADP**, binding glutamate synthase (NADPH), *Escherichia coli* 5488.
- NADP**, binding tetrahydrofolate dehydrogenase, nuclear Overhauser effect, *Lactobacillus casei* 2785.
- recycling, glucose-6-phosphate dehydrogenase, immobilized cells, *Escherichia coli* 4672.
- NADPH-cytochrome reductase**, purification, microsomes, *Rhizopus nigricans* 6468.
- Nalidixic acid**, + rifampin, antibiotic antagonism, antibacterial activity, *Staphylococcus aureus* 750.
- Nalidixic acid**, antifungal activity *Candida parapsilosis*, sterols biosynthesis, ultrastructure 7930.
- Naja naja siamensis**, toxicoids, antiviral activity, herpes simplex virus 1 7102.
- Nalidixic acid**, analogs, antibacterial activity 5187.
- analogs, antibacterial activity 7082.
- antibacterial activity, *Aeromonas hydrophila*, comparison, *Enterobacteriaceae* 6099.
- antibacterial activity comparison, pefloxacin, piperidic acid, flumequin 8761.
- antibacterial activity, *Enterobacteriaceae*, gram-positive cocci 7924.
- antibacterial activity, gram-negative bacilli bacteriuria isolates, man 7073.
- antibiotic resistance, *Escherichia coli*, urinary tract clinical isolates 7034.
- antibiotic sensitivity testing, *Campylobacter fetus* subsp. *jejuni*, clinical isolates 6099.
- comparison, norfloxacin antibacterial activity, *Pseudomonas aeruginosa*, *Streptococcus aureus* 5197.
- EDTA- α -trromethamine, antibacterial activity, *Escherichia coli* 8765.
- resistance, enhancement mechanisms, genetic analysis, *Escherichia coli* 7894.
- resistance, urinary tract clinical isolates, rosaxacin antibacterial activity 795.
- susceptibility, *Escherichia coli*, statistical analysis methodology 1795.
- Nanosomycin A**, biosynthesis, *Streptomyces rosa* var. *notensis* 3446.
- Nandina domestica**, nandina stem pitting virus infection 3012.
- Nandina stem pitting virus**, infection, *Nandina domestica* 3012.
- Nandrolone**, photoaffinity labelling, $\Delta 5$ -3-ketosteroid isomerase, *Pseudomonas testosteronei* 5489.
- Nannizilla fuva**, enzymes biosynthesis, media (culture) 3630.
- Nanoamycin**, antibacterial activity, *Vibrio alginolyticus* 1674.
- Naphthalene**, biodegradation, stereospecificity, *Cunninghamella elegans* 7019.
- Naphthalene oxygenase**, *Pseudomonas*, purification, characterization 7385.
- Naphthol**, inhibition, nitrification, *Pseudomonas*, *Nitrosomonas*, *Nitrobacter* 7007.
- 1-Naphthol**, levels, fungi, aromatic compounds oxidation 4521.
- Naphthomycin A**, biodegradation, *Penicillium gladioli*, 2,3-dicarboxy-4-methoxy-5-methylbenzoic acid biosynthesis 12.
- Naphthomycin B**, *Streptomyces*, isolaton, structure 8907.
- Naphthomycin C**, *Streptomyces*, isolation, structure 8907.
- Naphthoquinones**, derivatives biosynthesis, *Hendersonula toruloides* 6605.
- 2-Naphthylacetic acid**, antibacterial activity 9660.
- β -Naphthylalanine**, induction, ergot alkaloids biosynthesis, *Claviceps* 6590.
- Naphthol(1,2-3)-thiazoles**, derivatives, antifungal activity 7092.
- Naphthalene**, oxidation, *Cunninghamella elegans*, association, glucuronide, sulfate biosynthesis 2391.
- Naramycin B**, *Streptomyces griseus*, isolation, identification, activity 5267.
- Narciclas**, extracts, effects on abscisic acid production, *Cercospora rosicola* 2732.
- tobacco rattle virus, detection, enzyme-linked immunosorbent assay, hybridization analysis 6808.
- Nasopharynx**, epithelium, cell culture methodology, association Epstein-Barr virus 8095.
- isolates, antibacterial activity, cotrimoxazole, trimethoprim, sulfamethoxazole 7066.
- medical personnel, *Staphylococcus aureus* isolation, antibiotic resistance,

Nasopharynx, (continued)

antibiotic sensitivity testing 8980.
secretion, man, infection, influenza A virus, respiratory syncytial virus,
immunofluorescence diagnosis 9832.

Nasutitermes exilisus,

biological control, *Metarhizium anisopliae*, pathogens 1966.
pathogens, pest control, *Metarhizium anisopliae*, biological control 7502.

Natural selection,

Glycine max, disease resistance, *Phytophthora megasperma* 330.
Pseudomonas aeruginosa, virulence, gentamicin antibiotic resistance 6012.
reproductive strategy, pathogens, plant diseases, mathematical models 2976.
soil microorganisms, reproductive strategy 2336.

N1-m-chlorophenyl-N3-allyl- α,α' -thioisobutylamide dihydrochloride,

disease control, *Pisum sativum* powdery mildew, *Erysiphe polygoni* 4123.

N1-p-chlorophenyl-N3-allyl- α,α' -thioisobutylamide dihydrochloride,

disease control, *Pisum sativum* powdery mildew, *Erysiphe polygoni* 4123.

N2-(1,3-dicarboxypropyl)-L-leucine,

isolation, *Agrobacterium tumefaciens* induction crown gall 6390.

N,N-Dicyclohexylcarbodiimide,

role, gentamicin susceptibility enhancement, *Staphylococcus aureus* 8854.

N,N-Dimethyldodecanamine,

antibacterial activity, relationship, pH, temperature, emollients 5175.

Nebramycin,

biosynthesis, auxotrophs, mutants, antibiotic resistance, *Streptomyces cremoreus* 8020.
Streptomyces coeruleorantiacus, production, isolation, characterization 1676.
Streptomyces coeruleorantiacus sp. nov., biosynthesis 2588.

Necroslis,

Ascochyta pisi, toxins, role pathogenicity, *Pisum sativum* 1140.
bark, *Acer pseudoplatanus*, *Nectria coccinea*, *Diplodina acerina*, pathogenesis 5071.

bark, *Gnomonia platani*, *Cylindrocarpum heteronema*, *Platanus* 6920.

leaves, *Triticum*, yield reduction, *Sepotiria tritici* infection 9368.

Lycopersicon esculentum, *Cladospirum fulvum*, extracts, enhancement 3100.

Pseudomonas cichorii, outbreaks, *Chrysanthemum morifolium* stems, USA, Florida 5023.

Pseudomonas corrugata, incidence, *Lycopersicon esculentum* stems, USA, Florida 5025.

Pseudomonas syringae pv. *tomato*, plants, etiology 3065.

tobacco ringspot virus, *Malus pumila* 6783.

tomato ringspot virus, *Malus domestica*, *Xiphinema* vectors 4978.

via bark, interaction, broad bean leaf roll virus + pea early-browning virus + pea enation mosaic virus 7664.

Vigna unguiculata, *Fusarium equiseti*, India 2109.

Vigna unguiculata, haustoria growth, rust 3922.

viruses, *Vigna unguiculata*, environmental stress, relationship, electrolyte balance 2993.

Necrotic ringspot virus,

localization, pollen, enzyme-linked immunosorbent assay, *Prunus* 2148.

Necrotic yellows virus,

Lactuca sativa, detection, enzyme-linked immunosorbent assay, vectors, *Hyperomyzus lactucae* 415.

Nectria,

decomposition, leaf litter, *Abies alba* 2301.

Nectria cinnabarinella,

biodegradation, *Acer pseudoplatanus*, ecological distribution 4181.

blight, disease control, *Malus pumila*, benomyl, captan 4120.

canker, *Gleditsia triacanthos*, association roots pruning 9525.

canker, pathology, *Gleditsia triacanthos* 2314.

Nectria coccinea,

bark necrosis, *Acer pseudoplatanus*, pathogenesis 5071.

fungal flora, *Fagus grandifolia* bark 1438.

Nectria galligena,

canker, disease resistance, *Malus pumila* 1357.

disease resistance, benzoic acid production, fruits, *Malus pumila* 4081.

Nectria haematococca,

biochanin A biodegradation 8434.

infection, *Exocaulum affine*, stem rot, wilt 1262.

Needle blight,

Cercospora, *Pinus*, India, eradication 5878.

Cylindrocladum macrosporum, *pinus*, pathogenesis, disease control 7782.

Dothiorhiza pini, *Pinus radiata*, monoterpenes, effects on, spore germination 4143.

Needle cast,

Rhabdocline, *Pseudotsuga menziesii* 536.

Needlecast,

Mycosphaerella laricina, *Larix decidua*, new records, USA 9527.

Phaeoptychopogon gammanii, infectivity, relationship, *Pseudotsuga menziesii* developmental stages, USA, Washington 6928.

phyloplane microorganisms, fungal flora, *Pinus sylvestris* 9521.

Pseudotsuga menziesii, *Phaeoptychopogon gammanii*, disease control, aerial applications, chlorothalonil, USA, Washington 6879.

Rhabdocline pseudotsugae, chemical control, *Pseudotsuga menziesii* 2312.

Rhabdocline weinii subsp. *oblonga*, *Rhabdocline pseudotsugae* subsp. *pseudotsugae*, plantations, *Pseudotsuga menziesii* 5864.

Neisseria,

antibacterial activity, antibiotic M-92 3428.

antibacterial activity, ceftazidime 4367.

cefodizime antibacterial activity 7142.

norfloxacin antibacterial activity 7037.

piperacillin antibacterial activity 8844.

Neisseria gonorrhoeae,

antibacterial activity, acroloxacin 8754.

antibacterial activity, chloramphenicol, thiampenicol 756.

antibacterial activity, flumequine 2425.

antibacterial activity, macrolide antibiotics 8041.

antibacterial activity, mezlocillin, comparison, penicillins 6141.

antibacterial activity, norfloxacin 2432.

antibacterial activity, *Staphylococcus* 8047.

antibacterial activity, temocillin 2554.

antibacterial activity, ceftriaxone, disc-diffusion test 7998.

antibiotic resistance, antibiotic sensitivity testing 9637.

antibiotic Sch 29,482, antibiotic activity 3444.

antibiotic sensitivity testing 3382.

antibiotic sensitivity testing 3391.

antibiotic sensitivity testing 4334.

Neisseria gonorrhoeae, (continued)

antibiotic sensitivity testing, clinical isolates 8807.

antibiotic sensitivity testing, penicillin G, tetracycline, spectinomycin, cefotaxime, cefuroxime 5240.

antibiotic sensitivity testing, Thailand 7078.

antigens, enzyme-linked immunosorbent assay 3565.

clinical isolates, β -lactamase, antibiotic resistance 3295.

clinical isolates, antibiotic sensitivity testing 2513.

clinical isolates, cephalosporins, antibiotic sensitivity testing 5242.

detection, methodology, association, carbon dioxide 2693.

enzyme-linked immunosorbent assay 1780.

enzyme-linked immunosorbent assay, use diagnosis, gonorrhea 1796.

N-formimidoyl thienamycin antibacterial activity 776.

gonorrhea, diagnosis, *Limulus* lysate test, man 1778.

identification, media (culture), growth inhibition test 9925.

identification, methodology 872.

β -lactam antibiotics antibacterial activity 3401.

β -lactamase detection, assays 5407.

media (isolation), agar 9959.

ph. membrane vesicles, purification, affinity chromatography, methodology 835.

plasmids, antibiotic resistance, penicillin 3270.

temocillin antibacterial activity 2550.

Neisseria meningitidis,

antibacterial activity, macrolide antibiotics 8041.

antibodies, detection, immunoassays, E.S.R., methodology 9966.

antigens, detection, enzyme-linked immunosorbent assay 5396.

antigens, detection, latex agglutination 2663.

antimicrobial agents, effects on, cell adhesion 6106.

bacteriocins, growth, inhibition 3321.

batch culture, bacteriocins activity expression, recombination 7173.

capsules, polysaccharides, structure 4701.

children blood culture, detection, use, acridine orange, gram stain, methylene blue 8140.

endotoxins, *Limulus* lysate test, assays 289.

extracts, immunogenicity, use vaccines, mice 784.

N-formimidoyl thienamycin antibacterial activity 776.

β -lactam antibiotics antibacterial activity 717.

lactic acid biosynthesis 8206.

meningitis, diagnosis, latex agglutination 9957.

meningitis, latex agglutination diagnosis, man 3597.

penicillin effects on morphology 738.

polysaccharides, toxoids, immunochemistry, enzyme-linked immunosorbent assay 4430.

pyrimidines biosynthesis, enzymes activity 8340.

pyrimidines biosynthesis, enzymes regulation 8341.

Nematanthus,

Corynespora casicola leafspot 2192.

leafspot, *Myrothecium roridum* 5747.

Nematodes,

+fungicides, disease control, black shank, *Nicotiana tabacum* 4125.

Nematocera,

pest control, biological control, viruses 1016.

Nemstoda,

1,3-dichloropropene pest control, relationship viruses reservoirs, *Fragaria* ananassa disease control 9479.

effects on microorganisms canker pathogenesis, *Prunus cerasifera* 1212.

fungi, *Trifolium repens* roots invasion 5832.

rhizosphere, vesicular-arbuscular mycorrhizas inhibition, plants 5095.

vectors, grapevine fanleaf virus infection, *Vitis vinifera*, disease control 4131.

viruses disease transmission, plants, association feeding behavior 1121.

Xenorhabdus antibiotics activity 3372.

Nematophagous fungi,

host-parasite interactions, predator-prey interactions, *Panagrellus redivivus* 3650.

soil, Eire 4214.

Nematophthora gynophila,

parasites incidence, *Heterodera glycines* infection, *Glycine max* 2848.

Neocarzinostatin,

radioimmunoassay 9202.

Neolamdecamycin,

midcamycin conversion 4414.

Neomycin,

antibacterial activity, *Chlamydia* 9714.

antibacterial activity, *Pseudomonas* 7975.

antibacterial activity standardization 8855.

antibiotic sensitivity testing, urease positive bacteria 751.

biosynthesis, plasmids, *Streptomyces fradiae* 6160.

sensitivity, *Streptococcus* animal isolates 5193.

Neomycin B,

deamination, derivatives antibacterial activity, toxicity 5257.

Neomycin sulfate,

separation techniques, USS, Anion exchange resin 2559.

Neorales,

cattle, diarrhea, isolation, *Escherichia coli*, antibiotic sensitivity testing 3283.

Neopeptin,

antifungal activity, inhibition fungi cell walls biosynthesis, *Streptomyces* 4396.

Neopolyoxins,

multiple forms, isolation, characterization, *Streptomyces cacaoi* 7288.

Neopurpuratin,

Streptomyces purpuratus, production, factors affecting 5561.

Neopurpuratin production,

Streptomyces purpuratus+*Bacillus*, factors affecting 5561.

Neosamine C,

formation, role, *Streptomyces ribofidicus* ribostamycin transamination 8909.

Neosartoria fischeri,

soil microorganisms, Spain, check lists 3202.

Neovossia indica,

bunt, resistance, *Triticum aestivum* breeding 5817.

bunt, *Triticum aestivum*, nitrogen, agricultural practices, effects on, incidence 1159.

bunt, *Triticum aestivum*, relationship bakery products properties 5708.

bunt, *Triticum aestivum*, screening methodology 6350.

Nephelemetry,

lasers, automated methods, use, bacteria antibiotic sensitivity testing 9737.

methodology, microorganisms 5360.

Subject Index

- Nephotettix**, rice tungro virus, rice waika virus, *Oryza sativa* 6761.
vectors, rice gall dwarf virus disease transmission, *Oryza sativa* 4987.
- Nephotettix nigropictus**,
disease transmission, rice gall dwarf virus, *Oryza sativa* 1162.
vectors, rice tungro virus, *Oryza sativa* 4951.
- Nephotettix virescens**,
vectors, disease transmission, rice tungro virus, chemical control, plant extracts, oils 7737.
vectors, disease transmission, rice tungro virus, *Oryza sativa* 360.
vectors, rice tungro virus, disease control, insecticides 6847.
vectors, rice tungro virus, *Oryza sativa* 4951.
- Nepovirus**,
elimination, meristem tip culture, *Vitis vinifera* 3134.
- Nerolidol**,
biosynthesis, enzymatic activity, *Rhodotorula glutinis* 3723.
- Net blotch**,
Hordeum vulgare, fungicides effects on *Pyrenophora teres* 7770.
- Netherlands**,
man, *Escherichia coli* fecal microflora isolates, drug resistance 7033.
new records, *Xylaria oxycanthae* decay, *Crataegus monogyna* fruits 1057.
Salmonella isolates, antibiotic resistance, incidence 5161.
Solanum tuberosum, *Phytophthora infestans* infection, association metaxylal resistance 6795.
- Netilmicin**,
antibacterial activity 4358.
antibacterial activity 7168.
antibacterial activity, bacterial clinical isolates, media analysis 7074.
antibacterial activity, *Serratia marcescens* 4364.
antibacterial activity, *Staphylococcus aureus* 7152.
antibiotic synergism, azlocillin, *Pseudomonas aeruginosa* 8849.
- resistance, association, modification enzymatic, aminoglycoside antibiotics, *Pseudomonas aeruginosa*, *Enterobacteriaceae* 640.
- Neuraminidase**,
Bacteroides fragilis, isoelectric focusing, electrophoresis, activity 7377.
Bacteroides fragilis, isolation, characterization 6862.
production, *Streptococcus sanguis*, endocarditis isolates, isolation, characterization 7372.
- Neurological complications**,
food poisoning, man, *Aspergillus fumigatus* mycotoxins, contamination, bread 2947.
- Neurine**,
tissue culture, interferon, infection inhibition, vesicular stomatitis virus, herpes simplex virus 2490.
- Neurospora**,
monophenol monooxygenase, apoenzymes, copper reconstitution, kinetics, mechanisms 2762.
mutagenicity testing, chemical 8149.
mycelia breakage methodology, mitochondria, vacuoles isolation 4536.
pyruvate dehydrogenase multienzyme complexes, purification, characterization 4643.
ubiquinol-cytochrome c reductase, characterization, isolation, electron microscopy 6486.
- Neurospora crassa**,
ADP, phosphoenolpyruvate, fructose-1,6-diphosphate, valine binding pyruvate kinase 1931.
catechol oxidase, structure, spectroscopy, mechanisms, reviews 6549.
DNA, isolation, methodology 4511.
enzymepyrrolysylmethionine-5-phosphate synthase, N-(phosphonomethyl)glycine inhibition 4689.
3-oxopropyl, use, oranges, extraction, oils, product 8483.
galactomannan characterization, isolation 1950.
glutamate dehydrogenase (NADP⁺), kinetics, ammonium, rubidium activation 4620.
Myo-inositol-1-phosphate synthase glucose-6-phosphate dehydrogenase fractionation, characterization 78.
niral resistance, toxicity, cobalt, copper, magnesium 7906.
polypolyglutamate synthetase, purification, characterization 67.
production, cellulase, ethanol, use, cellulose 4740.
protoplasts, antifungal activity, antibiotics, detection methodology 5440.
pyruvate kinase variants, purification, characterization 5495.
ribosomal proteins biosynthesis regulation 4562.
- Neurospora tetrasperma**,
6-phosphofructokinase stimulation, fructose 2,6-bisphosphate role 9130.
- Neurotoxins**,
Clostridium botulinum, urea effects on activity 5661.
Escherichia coli, serological tests, edema diagnosis 3885.
phytoalexins, *Lolium perenne*, response fungi infection 3955.
purification, amino acid composition, *Clostridium botulinum* type E 9300.
purification, amino acid composition, *Clostridium botulinum* type F 9301.
purification, physicochemical properties, *Clostridium botulinum* 7635.
- Neutralization**,
assays, serum, antibodies, parvovirus (canine) 1765.
detection antibody response, avian infectious bronchitis virus, chickens 9014.
enterotoxins, vibrio cholerae, *Escherichia coli* 2957.
plaque assay, poliovirus 6238.
Staphylococcus aureus, media (culture), recovery, methodology 5425.
use, enterotoxins characterization, *Escherichia coli*, *Vibrio cholerae* 7634.
varicella-zoster virus comparison herpesvirus (simian), infection pathology 1756.
- Neutron activation analysis**,
characterization, *Ustilago scitaminea* races, *Saccharum officinarum* smut 6760.
- New species**,
Clostridium, acetic acid production 4572.
- New Zealand**,
alfalfa mosaic virus, plant diseases, host range 9317.
Chionochloa rigida grasslands soil, assays, β -D-fructofuranosidase, amylase, pH effects on 9565.
Chionochloa rigida grasslands soil, assays, amylase, β -D-fructofuranosidase, buffers 9564.
Eucalyptus, leafspot, fungi 7706.
fungi, antifungal agents resistance 7880.
new records, plant diseases, fungi 322.
phosphonates soil, relationship, bacteria 1469.
- New Zealand, (continued)**
Pinus radiata, *Pseudotsuga menziesii*, *Eucalyptus*, *Nothofagus*, *Leptospermum*, mycorrhizas 7774.
plants diseases, fungi, new records 3899.
plants, pathogens, fungi, new records 326.
plants, plant viruses, host range, arabis mosaic virus, tomato spotted wilt virus 6731.
tomato yellow top virus infection, *Lycopersicon esculentum*, new records 9435.
- Newcastle disease**,
vaccines, aerosols, antibody response, chickens 7188.
- Newcastle disease virus**,
antiviral activity, food wastes fermentation, *Lactobacillus acidophilus*, *Saccharomyces cerevisiae* 7595.
antiviral activity, poly(β -L- α , β -diaminopropionic acid) 4315.
antiviral activity, quaternary ammonium compounds 1571.
vaccines, agglutination tests, methodology 2648.
vaccines production, immunity, chickens 1687.
vaccines, production methodology effects on efficacy, chickens 8923.
- Niches**,
denitrifying bacteria 5110.
- Nickel**,
Bacteroides susceptibility 681.
effects on ectomycorrhizas, growth 3189.
resistance, toxicity, cobalt, copper, magnesium, *Neurospora crassa* 7906.
toxicity, *Achylla*, *Saprolegnia*, *Cunninghamella blakesleeana*, *Aspergillus clavatus*, *Aspergillus flavus* 1565.
- Nickel sulfate**,
Azotobacter, effects on nitrogen fixation 2368.
- Nickle(II)**,
substitution, effects on aminopeptidase activity, *Aeromonas proteolytica* subsp. *proteolytica* 8277.
- Nicotiana**,
callus, production, phytylberin, phytylberol, association, *Pseudomonas solanacearum* infection 6845.
disease resistance, black shank, *Phytophthora parasitica*, genetic analysis 1340.
disease resistance, blue mold, powdery mildew, wildfire, plant breeding 1339.
Pseudomonas fluorescens, induction, disease resistance 3131.
Pseudomonas fluorescens, induction, disease resistance 3133.
- Nicotiana aestivum**,
protoplasts, tobacco mosaic virus multiplication inhibition, poly(2-methyl-5-vinylpyridine N-oxide) role 8582.
- Nicotiana benthamiana**,
dashed mosaic virus, *Richardia affinis*, *Araceae* 9420.
infectivity, geminivirus, DNA clones, nucleotide sequence role 9370.
tissues ultrastructure, transmission, cassava latent virus mosaic disease, *Manihot esculenta* 1315.
- cymbidium ringspot virus cytopathology 4035.
- Nicotiana clelandii**,
cymbidium ringspot virus cytopathology 4035.
Cymbidium ringspot virus infection, effects on, peroxisomes, vesicles, formation 4027.
- Nicotiana debneyi**,
× *Nicotiana glutinosa*, hybrids, proteins, relationship, tobacco mosaic virus, resistance 1334.
- Nicotiana glauca**,
extracts, cucumber mosaic virus RNA deflection 5783.
pathology, stem rot, *Rhizopus arrhizus* 5762.
- Nicotiana glutinosa**,
antiviral agents, α -interferon, simulation nucleotides biosynthesis, antiviral activity, tobacco mosaic virus 7746.
glycoproteins, defense mechanisms, viruses infection, poly(I)-poly(C) + cyclic AMP + cyclic GMP, activation 3136.
× *Nicotiana debneyi*, hybrids, proteins, relationship, tobacco mosaic virus, resistance 1334.
tobacco mosaic virus infection, antiviral agents induction 5818.
tobacco mosaic virus infection, yeasts extracts inhibition 6887.
tump mosaic virus infection, cytology 2164.
- Nicotiana rustica**,
age effects on rhizosphere microorganisms 7795.
transmission (mechanical), potato yellow dwarf virus, density variability 6805.
- Nicotiana sanderae**,
tobacco mosaic virus infection, yeasts extracts inhibition 6887.
- Nicotiana sylvestris**,
infection, tobacco mosaic virus strains competition 9449.
- Nicotiana tabacum**,
antiviral agents, α -interferon, simulation nucleotides biosynthesis, antiviral activity, tobacco mosaic virus 7746.
black shank, disease control, fungicides + nematodes 4125.
black shank, *Phytophthora parasitica* var. *nicotianae*, temperature, rainfall, effects on, pathogenesis 3050.
blue mold, *Peronospora hyoscyami*, disease control, metaxylal, resistance 5063.
blue mold, *Peronospora tabacina*, spores release, disease spread, wind 4995.
cell membranes peroxidation, *Cercospora nicotianae* cercosporin role 9442.
crown gall, *Agrobacterium tumefaciens* Ti plasmid DNA analysis 7690.
Cucumber mosaic virus, infection, effects on, chlorophylls, starch, cells, ultrastructure 3078.
cultivars, susceptibility, cucumber mosaic virus 2168.
disease resistance, disease control, potato virus X, ribavirin, 5-azadihydrouracil 2271.
disease resistance, *Erysiphe cichoracearum*, white mold 4091.
disease resistance, host-pathogen interactions, tobacco mosaic virus 2170.
disease resistance, role, N gene, association, tobacco mosaic virus coat protein 6848.
disease resistance stimulation, models, tobacco mosaic virus 8617.
disease resistance, tobacco mosaic virus, callus deposition, role boron 1377.
DNA organization, *Agrobacterium tumefaciens* crown gall 2202.
elimination tobacco mosaic virus, temperature effects on 457.
fatty acid composition, phospholipids, hypersensitive response, tobacco mosaic virus 7741.
glycoproteins, purification, callus culture, agglutination, *Phytophthora parasitica*, *Pseudomonas solanacearum* 1351.
hypersensitive response, disease resistance, tobacco mosaic virus 1374.
hypersensitive response, disease resistance, tobacco mosaic virus 3110.
hypersensitive response, *Pseudomonas pisi*, RNA biosynthesis inhibition 587.
hypersensitive response, tobacco mosaic virus, 2-chloroethylphosphonic acid,

Nicotiana tabacum, (continued)

- salicylic acid, effects on 4095.
inheritance tobacco mosaic virus disease resistance, plant breeding 3115.
leaves, post-harvest decay, *Botryosporium longibrachiatum* 9454.
leaves, *Pseudomonas* pisi infection, hypersensitive response association mesophyll 462.
leaves, *Pseudomonas syringae* pv. tabaci, lipopolysaccharides, association, encapsulation 3064.
leaves, tobacco mosaic virus infection, heat balance, energetics 1288.
leaves, tobacco mosaic virus infection, ultrastructure localization 4033.
leaves, ultrastructure, hypersensitive response, *Pseudomonas* pisi 6790.
lignin biosynthesis, hypersensitive response, tobacco mosaic virus 4080.
microflora, antifungal agents effects on 496.
Peronospora hyoscyami infection, susceptibility, metaxylal 4126.
peroxidase, role disease resistance, tobacco mosaic virus, potato virus X 2162.
potato virus X, antiviral activity, thiourea derivatives 8641.
potato virus X infection, inclusion bodies, induction, structure 1238.
potato virus X, tobacco mosaic virus, bromo mosaic virus,
2,4-dioxohexahydro-1,3,5-triazine + guanine antiviral activity 6886.
potato virus Y, disease transmission, vectors, Aphididae 9400.
potato virus Y infection, association disease resistance, *Meloidogyne incognita* 9433.
potato virus Y infection, epidemiology 4046.
potato virus Y infection, relationship disease resistance, *Meloidogyne incognita* 9432.
proteins, hypersensitive response, tobacco mosaic virus 3081.
protoplasts, actinomycin D, effects on, tobacco mosaic virus, tobacco ringspot virus, tobacco rattle virus, potato leaf roll virus, infection 7701.
protoplasts, secretions, inhibition, tobacco mosaic virus, replication 3114.
Pseudomonas pisi infection, hypersensitive response 4980.
Pseudomonas replication, factors affecting host-parasite interactions 5816.
screening, disease resistance, tobacco etch virus infection 1382.
soil, water potential, effects on, *Phytophthora parasitica* var. *nicotianae*, infection 9393.
tissue culture, *Agrobacterium tumefaciens* binding, crown gall 2977.
tissue culture, digitonin effects on virulence, mycoplasma-like organisms 2175.
tissues, tobacco necrosis virus infection, peroxidase, lacase, ribonuclease, induction 318.
tobacco mosaic virus infected, methodology, isolation, double-stranded RNA 3897.
tobacco mosaic virus infection, antiviral activity, EDTA treatment 511.
tobacco mosaic virus infection, economic importance, yield, relationship, disease resistance 9395.
tobacco mosaic virus infection, leaves protoplasts 3041.
tobacco mosaic virus infection, effects on, yield, USA, North Carolina 9396.
tobacco mosaic virus inoculation, polyarins, polycations infection 4989.
tobacco mosaic virus, replication, pathogenesis 4038.
tobacco mosaic virus replication, ribonuclease inhibition 6885.
treatment, metaxylal, blue mold, *Peronospora hyoscyami* 2287.
tumors, *Agrobacterium tumefaciens* crown gall, morphology, genetic control 7689.
viruses infection, quarantine treatment 1198.
white mold, disease resistance, *Erysiphe chichoracearum* 4074.

Nicotinamadenucleotide amidase

- purification, characterization, *Aspergillus* 6457.
Nicotinic acid,
biosynthesis, *Fusarium moniliforme*, indole-3-acetic acid, tryptophan, effects on 1841.
nutrient requirements, *Sesbania rhizobium* 9577.

Niger

- Oryza sativa, incidence, *Xanthomonas campestris* pv. *oryzae* blight 9355.

Nigerazine B

- Aspergillus niger*, metabolites, structure, characterization 8338.

Nigeria

- candidiasis incidence, man, methodology 1812.
Cucumber mosaic disease, viruses etiology, isolation, characterization 4025.

- Streptococcus group G serotyping 1773.

- wells, microbial pollution, public health, man, coliforms 8067.

Nigericin

- role, gentamicin susceptibility enhancement, *Staphylococcus aureus* 8854.

Nigrospora

- colonization, *Sorghum bicolor* stalks, roots 5715.

Nigrospora sphaerica

- crown rot, *Musa sapientum*, pathogenicity 395.

- leavespot, *Cymbopogon martinii* 3985.

Nilkomyelin

- production, streptomycetes, mycelia, immobilized cells 1685.

Nipervate lugens

- disease transmission, grassy stunt virus, Oryza sativa 4952.

- plant diseases, *Fusarium oxysporum*, biological control 3719.

Nipagin

- antimicrobial activity, semen cryopreservation media contamination 1591.

Nitrazole

- antibacterial activity, aerobic bacteria, anaerobic bacteria 3328.

Nitrate

- +benomyl+calcium oxide, integrated control, *Fusarium oxysporum* f.sp. *lycopersici*, wilt, *Lycopersicon esculentum* 4108.
+calcium oxide+benomyl, integrated control, *Fusarium oxysporum* f.sp. *lycopersici*, wilt, *Lycopersicon esculentum* 4107.
effects on, *Pachysolen tannophilus*, fermentation, xylase, glucose 7534.
effects on *Rhizobium meliloti*, nodules development, *Medicago sativa* 3239.
effects on soil microorganisms, hydrocarbons gas production, anaerobic conditions 9567.

- Glycine max nodules, effects on nitrification 8693.

- inhibition *Rhizobium trifolii* attachment roots, trifolium repens 4242.

- Lactuca sativa*, effects on *Gliomus mosseae* symbiosis 5903.

- levels, soil properties, seasonal variations, agricultural practices 6684.

- maize, effects on viruses infection 3027.

- nutrition, effects on, viruses infected, *Malus pumila* 389.

- reduction, *Thiobacillus denitrificans*, entrapment, agarose 874.

- role, *Clostridium* growth inhibition, silage fermentation 6681.

- soil amendment, foliar applications, effects on, *Gliomus mosseae* symbiosis, *Zea mays* 4204.

- sources, effects on soil denitrification 2375.

Nitrate reductase

- Clostridium perfringens*, strains comparison 5500.

- denitrification, hydroxylamine, pyruvic oxime, Alcaligenes, soil 596.

Nitrate reductase, (continued)

- purification, characterization, *Bacillus stearothermophilus* 2804.

- Rhizobium*, measuring techniques 1507.

Nitrate reductase (NAD(P)H)

- Hansenula anomala*, assimilation, electron transfer, distribution 6517.

- purification, characterization, *Hansenula anomala* 5502.

Nitrate reductase (NADH)

- Trifolium subterraneum*, mycorrhizas symbiosis effects on 6997.

Nitrate reduction

- analysis, soil, anaerobiosis conditions 7845.

- nitrogen cycle, soil properties, measuring techniques 4231.

- soil, association, tillage, crop production (no-tillage), USA, Maryland, USA, West Virginia 5580.

- soil microorganisms, temperature effects on 7839.

Nitrate-reducing bacteria

- contamination, animals feeds, yeasts nitrate-reducing bacteria 1085.

- growth, refrigeration, lettuce, radishes 3836.

Nitrates

- nutrition effects on cucumber green mottle mosaic virus replication, *Cucumis sativus* 2183.

Nitric oxide

- Glycine max nodules, effects on *Rhizobium japonicum* nitrogenase 1501.

Nitric-oxide reductase

- denitrification, hydroxylamine, pyruvic oxime, Alcaligenes, soil 596.

Nitrification

- acetylene pressure effects on, soil 617.

- activated sludge, growth kinetics 5299.

- aerobic digestion, sewage sludge 5302.

- Aspergillus*, nitrogen sources, soil 9584.

- autotrophic bacteria, heterotrophic bacteria, acetylene effects on 594.

- carbaryl, naphthol, inhibition, *Pseudomonas*, *Nitrosomonas*, *Nitrobacter* 7007.

- forests, association, succession, trees 4140.

- forests, terrestrial ecosystems, association, nitrogen cycle 513.

- Glycine max nodules, nitrate effects on 8693.

- inhibitors, bacteriostasis 2405.

- mathematical models, films, reactors 6057.

- mixed culture, *Nitrosomonas europaea* + *Nitrobacter winogradskyi*, sodium chlorate, sodium chloride, effects on 5106.

- nitrifying bacteria, herbicides effects on 9619.

- nitrifying bacteria, soil pollution, heavy metals effects on 4238.

- nitrogen cycle, agricultural ecosystems, *Oryza sativa* 3224.

- Nitrosomonas europaea*, immobilized cells 9063.

- Nitrosomonas europaea*, *Nitrobacter agilis*, soil reactors 2357.

- relationship, *Aspergillus flavus*, aflatoxins biosynthesis 1103.

- rhizosphere inhibition, *Juniperus procera*, forests 3223.

- soil microorganisms, agricultural practices, crop fields, *Trifolium* 8680.

- soil microorganisms, biomass, nitrogen sources, urea, fertilizer applications 5968.

- soil microorganisms, inhibition, carbon disulfide, 4-amino-1,2,4-triazole hydrochloride, 2-chloro-6-(trichloromethyl)-pyridine 9624.

- soil properties, soil microorganisms 8667.

- soil, relationship, soil amendment, animal wastes, ammonium sulfate 7834.

- soils (acid), Coniferaleae forests, *Nitrobacter* 1446.

- systems, activated sludge, growth suspensions 4433.

- Triticum, soils (loam), fertilizers (slow release) effects on 621.

- wastewater treatment 5288.

Nitrifying bacteria

- Carbaryl nitrifying bacteria, inhibition nitrification 1063.

- carbon disulfide emulsions effects on 9553.

- films, bioreactors, fluidity, porosity 9059.

- heavy metals effects on ammonification, nitrification, soil pollution 4238.

- immobilized cells, electrodes, nitrogen dioxide detection 9055.

- immobilized cells, electrodes, urea detection 1804.

- nitrification, forests, association succession, trees 4140.

- nitrification, herbicides effects on 9619.

- nitrification, rhizosphere inhibition, *Juniperus procera*, forests 3223.

- nitrification, wastewater treatment 5286.

- seasonal variations, association, Fagus forests, soil nitrogen mineralization 4137.

- sewage oxidation 5327.

- wastewater treatment, denitrification, factors affecting 9797.

- wastewater treatment, dissolved oxygen effects on continuous culture reactors 1705.

Nitrotriacetic acid

- biodegradation, microorganisms, seasonal variations, water salinity effects on, aquatic environment 2876.

- biodegradation, water hardness effects on, activated sludge 2611.

- biodegradation, water hardness effects on, activated sludge 2612.

- marine pollution, sewage effluents, biodegradation, marine microorganisms, bacteria 5323.

Nitrite

- association, bacteria nitrogen fixation inhibition 5124.

- control, *Clostridium botulinum*, cured products, reviews 4821.

- formation, bacteria, spoilage, spinach 435.

- Glycine max nodules, effects on *Rhizobium japonicum* nitrogenase 1501.

- inhibition, *Clostridium botulinum* growth, toxigenicity, organoleptic properties, sausages 303.

- interaction, lactoferrin, transferrin, inhibition, *Bacillus cereus*, sporulation 3329.

Nitrite reductase (NAD(P)H)

- Wolonia succinogenes*, purification, characterization 9166.

Nitrite reductase (NADH)

- iron-sulfur centers, E.S.R., *Escherichia coli* 73.

Nitrite reduction

- analysis, soil, anaerobiosis conditions 7845.

Nitroanilines

- Pseudomonas*, biodegradation 5581.

Nitroaromatic compounds

- sewage, transformation, microorganisms 5288.

Nitrobenzyl

- carbaryl, naphthol, inhibition, nitrification 7007.

- immobilized cells, oxygen electrodes, use, sodium nitrite sensors 5430.

- nitrification inhibition, rhizosphere, *Juniperus procera*, forests 3223.

- nitrification, soils (acid), forests, Coniferaleae 1446.

Nitrobacter agilis

- nitrification, soil reactors 2357.

- Nitrobacter wingogradskyi**,
nitrification, acetylene effects on 594.
- Nitrobacter winogradskyi**,
+ *Nitrosomonas europaea*, mixed culture, nitrification, sodium chlorate, sodium chlorite, effects on 5106.
- Nitrofen**,
pesticide residues, biodegradation, persistence, mobility, soil microorganisms, Canada 8704.
- Nitrofurantoin**,
paddy fields soil, effects on nitrogen fixation, heterotrophic bacteria 619.
resistance, *Fusarium oxysporum*, association closed circular DNA 656.
- Nitrofurantoin**,
characterization, *Escherichia coli* 7316.
Salmonella typhimurium, isolation, characterization 9180.
- Nitrofurans**,
Escherichia coli, cross-resistance, aminoglycoside antibiotics 7045.
- Nitrofurantoin**,
bacteria urinary tract isolates, antibiotic sensitivity testing, antibiotic resistance 4287.
drug resistance, *Escherichia coli* mutants 3276.
resistance, association, *Vibrio cholerae* lysis, Tris + EDTA treatment 7927.
sensitivity, *Streptococcus* animal isolates 5193.
Staphylococcus clinical isolates, susceptibility 3281.
susceptibility, *Escherichia coli*, statistical analysis methodology 1795.
- Nitrofurazone**,
drug resistance, *Escherichia coli* mutants 3276.
- Nitrogen**,
assimilation, association, nodulation Glycine max 606.
atmosphere, photochemistry, environmental impact 604.
constituents, *Pericillium commune* 4714.
containing cations complex, antibacterial activity 7921.
content, soil, measuring techniques, books, conferences 9098.
deficiency, association, *Aspergillus candidus* extracellular proteolytic enzymes biosynthesis 1933.
effects on, incidence, bunt, *Neovossia indica*, *Triticum aestivum* 1159.
effects on *Oryza sativa*, susceptibility, leaf blight, *Xanthomonas campestris* pv. *Oryza* 6750.
fertilization, effects on mycorrhizas, *Pinus sylvestris* 3163.
fertilizers content, effects on *Phytophthora nicotianae* var. *parasitica* buckeye rot, *Lycopersicon esculentum* 9445.
fertilizers, effects on *Leguminosae* nitrogen fixation 5105.
fertilizers, effects on lung bean mild mosaic virus pathogenicity, *Phaseolus aureus* 8534.
fertilizers, effects on *Trifolium repens* nitrogen fixation, yield 2364.
fertilizers, fungicides, disease control, mildew, brown rust, *Hordeum vulgare* 5636.
leaching, fungi mycelia, leaf litter decomposition, *Collembola* grazing effects on 3214.
levels, *Archidia hypogaea*, *Glomus fasciculatus* effects on 6949.
levels, *Medicago sativa*, genotypes, nitrogen fixation, *Rhizobium meliloti* 605.
levels, salt marshes soil, effects on denitrification 2367.
levels, soil, relationship, *Pseudomonas paucimobilis* growth, nutrition, ATP production 4218.
levels, storage conditions, *Pseudomonas marginalis* soft rot, post-harvest decay, tomatoes 8453.
limitations, continuous culture, batch culture, *Clostridium acetobutylicum*, production, butanol, acetone 8393.
Malus, association viruses infection effects on amino acids 4974.
metabolism, *Vitis vinifera*, frost + mildew disease resistance 7688.
mineralization, forests, disturbance, nutrient dynamics 6901.
mineralization, forests soil 523.
mineralization, fungi, forests nitrogen cycle 514.
mineralization, *Pseudomonas cepacia*, grazing, association, *Mesodiplogaster*, *Acanthamoeba polyphaga*, effects on 614.
mineralization, sewage sludge land disposal, salinity effects on 6955.
mineralization, soil acidification, forests, mathematical models 4138.
mineralization, soil, *Fagus* forests, association, nitrifying bacteria, ammonifying bacteria, seasonal variations 4137.
mineralization, soil microorganisms, nutrient cycles, soil 6996.
mineralization, soil properties, forests 6895.
mineralization, soil treatment, mycelia, organic matter 5949.
mineralization, tillage, effects on, soil properties, microorganisms, biomass 2359.
nutrient dynamics, *Rhizobium*, hydrogen production, *Vigna unguiculata* 4247.
nutrient sources, rhizosphere microorganisms, plant communities, nival zone 4213.
nutrient status, mycorrhizas, *Glomus fasciculatus*, *Bouteloua gracilis* 1485.
nutrient status, mycorrhizas, seasonal variations, *Gramineae* 1490.
nutrient uptake, nitrogen fixation inhibition, *Leguminosae* 8685.
nutrition effects on, *Fusarium oxysporum* f.sp. *lycopersici* wilt, *Lycopersicon esculentum* 411.
nutrition, *Triticum aestivum*, role, nitrogen-fixing bacteria, rhizosphere microorganisms 7006.
nutrition, Zea mays, *Triticum aestivum*, role, *Azospirillum brasilense* biomass 7011.
packaging, potatoes, spoilage, psychophilic bacteria 4883.
peat, nutrient levels, mineralization, bogs, particle size, soil microorganisms 8697.
production, leaf litter decomposition, bacteria, *Fagus sylvatica*, coniferaleas, association, climate 2021.
production, facultative bacteria, wastewater treatment 5331.
soil fertility, relationship *Laetisaria fulciformis* infection, *Lolium perenne* 8357.
storage conditions, fishery products, effects on, *Pseudomonas*, *Moraxella*, *Lactobacillus* 8498.
uptake, *Cenococcum graniforme*, glutamate dehydrogenase (NADP⁺) activity, purification 6464.
uptake, crops, competition, soil microorganisms 599.
- Nitrogen balance**,
leaf litter decomposition, *Pinus sylvestris* 3161.
soil, association crop production (no-tillage), Zea mays 6986.
soil, denitrifying bacteria, urine effects on 2371.
soybean mosaic virus, effects on, Glycine max, Glycine soja 8533.
- Nitrogen cycle**,
agricultural ecosystems, *Oryza sativa* 3224.
agricultural ecosystems, plantations, Coffea 3217.
aquatic ecosystems, terrestrial ecosystems, factors affecting, soil
- Nitrogen cycle, (continued)**
microorganisms, conferences 908.
Azobacter, solar eclipse effects on 2370.
biogeochemistry, regulation, soil microorganisms, agricultural ecosystems 3221.
day, soil microorganisms effects on vegetation 603.
decomposition, leaf litter, forests 528.
denitrification, forests, clear cutting 6902.
ecosystem analysis 4230.
ecosystem dynamics, *Pinus resinosa*, forests 526.
fertilization, soil, grasslands 9614.
forests, fungi, nitrogen mineralization 514.
forests, soil microorganisms, canopies effects on 512.
forests, terrestrial ecosystems, nitrification association 513.
grasslands 2372.
lakes, USA, Washington, volcanoes, environmental impact, effects on bacteria 5122.
leaf litter decomposition, Coffea plantations 3218.
leaf litter decomposition, forests 2306.
leaf litter decomposition, forests 2308.
leaf litter decomposition, soil microorganisms 2362.
nitrate reduction, soil properties, measuring techniques 4231.
nutrient dynamics, plantations, *Theobroma cacao* 3222.
nutrient sources, plantations, *Theobroma cacao* 3219.
rain forests 2307.
Rhizobium japonicum symbiosis, Glycine max 8701.
Rhizobium, solar eclipse effects on 2370.
savannahs 2376.
savannahs 5099.
soil, Finland, N-(phosphonomethyl)-glycine effects on 5972.
soil microorganisms, biomass labelling, nitrogen-15 2339.
soil microorganisms, *Medicago sativa* saponins effects on, peat 2355.
soil microorganisms, prophan + mediotetrabactate effects on 7012.
USA, Alaska 7849.
- Nitrogen dioxide**,
detection, electrodes, nitrifying bacteria immobilized cells 9055.
- Nitrogen fixation**,
acetylene reduction, measuring techniques, soil, forests 7835.
acetylene reduction, seasonal variations, cultivars effects on, Glycine max 9581.
actinorhizas, nodules, seasonal variations, diurnal variations, soil temperature effects on, *Ceanothus velutinus* 9513.
Aeschynomene indica, growth conditions, *Rhizobium* 3244.
analysis, isotopes methodology, *Leguminosae* 5131.
Archidia hypogaea, yield, fertilizer applications effects on 6994.
Azospirillum, association, *Gramineae* 5941.
Azospirillum brasilense, association *Setaria italica* life cycle 8702.
Azospirillum brasilense, *Azobacter chroococcum*, rhizosphere, yield, Zea mays, *Sorghum bicolor* 1500.
Azospirillum brasilense, inoculation, rhizosphere, yield, *Triticum aestivum* 9602.
Azospirillum brasilense, nitrogenase, purification, characterization 6505.
Azospirillum, inoculation, yield, *Triticum aestivum*, *Triticum turgidum* 9599.
Azospirillum, rhizosphere, inoculation effects on, yield, Zea mays 9598.
Azospirillum, rhizosphere, *Ipomoea batatas* 9594.
Azospirillum, soils (saine), India 7840.
Azobacter chroococcum, seed treatments, effects on yield, *Cyperus rotundus* 8677.
Azobacter chroococcum, seeds inoculation, Zea mays 4233.
Azobacter chroococcum, soil inoculation, nitrogen sources, Zea mays 4232.
Azobacter, nickel sulfate effects on 2368.
Azobacter paspali, nitrogen-15, measuring techniques, rhizosphere, *Paspalum notatum* 9609.
Azobacter, sodium molybdate effects on 3233.
Azobacter, use fertilizers 607.
Azobacter vinelandii, antibiotic resistance mutants 9618.
Bacillus, Brazil soil 5961.
Bacillus polymyxa, *Azospirillum brasilense*, nitrogen-15 dilution, rhizosphere, *Triticum aestivum* 9587.
bacteroids, ammonia assimilation, nodules, *Trigonella foenum-graecum* 3242.
bogs 3213.
books 8180.
Campylobacter nitrofigilis sp. nov., *Spartina alterniflora* 7856.
Casuarina equisetifolia, Frankia = *Glomus mosseae*, effects on 3215.
Cicer arietinum, association, *Azospirillum brasilense* = *Rhizobium* 5963.
Cicer arietinum, *Rhizobium* nodulation 6989.
Clostridium butyricum, straw 3216.
comparison, acetylene reduction, conversion factors, soil, water content, nitrogenase activity, effects on 7005.
Cyanophyta, association *Oryza sativa*, deep water, Philippines 2358.
Cyanophyta, *Oryza sativa*, USSR 7846.
Cyanophyta, *Rhizobiaceae*, conferences 6361.
Diplacne fusca rhizosphere microorganisms, soil isolates 592.
efficacy, Egypt, Arab Rep. deserts nitrogen-fixing bacteria 9607.
efficiency, *Rhizobium japonicum* nodulation, Glycine max 7833.
enhancement, molybdenum, *Azobacter vinelandii* 3211.
Escherichia coli, plasmid pHD1 transfer, *Enterobacter cloacae* 5113.
estimation, isotopes dilution methodology, field trials, greenhouse trials 5126.
Frankia *nit* actinorhizas, *Ainus rubra* 5958.
glutamate synthase, association, glutamate synthase, role, ammonia assimilation 5939.
Glycine max, association ureides 2365.
Glycine max, *Glomus mosseae* inoculation effects on 4184.
Glycine max, nitrogen-fixing bacteria, nitrogen fixation, Glycine max 2363.
Glycine max nodules, enzymes effects on, *Rhizobium japonicum* 8694.
Glycine max, nodules, *Rhizobium japonicum*, hydrogen uptake effects on 7009.
Glycine max, tillage effects on 5130.
Hordeum rhizosphere, rhizoplane, relationship, *Spirillum lipoferum* 4241.
inhibition, bacteria, association nitrite 5124.
inhibition, nitrogen nutrient uptake, *Leguminosae* 8685.
interaction carbon dioxide fixation, Glycine max 4236.
Klebsiella pneumoniae, association, nitrogenase, *nif* gene 1495.
Klebsiella pneumoniae, nitrogenase activity, mechanisms 5935.
Leguminosae, association, carbon flux 5938.
Leguminosae, books 8177.
Leguminosae, fires, fertilizer applications, phosphorus effects on 517.
Leguminosae, Israel 5946.
Leguminosae, nitrogen fertilizer effects on 5105.
Leguminosae, *Rhizobium japonicum*, hydrogen production, recycling 5936.

Nitrogen fixation, (continued)

- Leguminosae, role Rhizobium 600.
light wavelength effects on, Trifolium repens 9589.
measurement, Rhizobium, Glycine max 5129.
measuring techniques, Glycine max, field trials 5962.
measuring techniques, nitrogen-15 dilution 9610.
measuring techniques, nitrogen-15, field trials, Glycine max, Vicia faba 9611.
measuring techniques, rhizosphere, nitrogen-15 9608.
Medicago sativa, water stress effects on 4234.
metallaxyl, Dowco 444, seed treatments effects on, disease control, Phytophthora blight 13p, glycine, Glycine max 8644.
methanogenesis inhibition, Glycine max 3251.
mung bean yellow mosaic virus infection inhibition, Vigna radiata 1144.
Myrica conferta, understorey, plantations, Pinus elliotii 5853.
Myrica gale roots nodules, oxygen concentration 7859.
nitrogen-fixing bacteria inoculation, Lupinus 5952.
nitrogen-fixing bacteria, nutrient dynamics, decomposition, Pseudotsuga menziesii 515.
nitrogen-fixing bacteria, Prosopis glandulosa, deserts 3210.
nitrogen-fixing bacteria, Rhizobium, genetic analysis, crops 9604.
nitrogen-fixing bacteria, rhizosphere, conferences 10008.
nitrogen-fixing bacteria, rhizosphere, orchards, Artocarpus heterophyllus, Areca 9585.
nitrogen-fixing bacteria, rhizosphere, Sorghum bicolor, Pennisetum americanum 9612.
nitrogen-fixing bacteria, soil, forests ecosystems, reviews 9511.
nitrogen-fixing bacteria soil isolates, cobalt stimulation 3236.
nodulation, Alnus rubra, interaction Populus, biomass, mixed culture, silviculture 9512.
nodulation, Eleoagis umbellata, calcium hydroxide, soil amendment effects on 1506.
nodulation, fast-growing Rhizobium japonicum, Glycine soja 4249.
nodulation, mixed culture, Arachis hypogaea, Gramineae 4250.
nodulation, phosphorus fertilizer applications, shading effects on, Inga jinicuil 7843.
nodulation, Rhizobium, carbon sources utilization, photosynthesis, Vicia faba 515.
nodulation, Rhizobium melioli, carbon dioxide concentration, effects on, light intensity, Medicago sativa 9586.
nodulation, soil compaction, precipitation effects on, Glycine max 9999.
nodules, respiration, water stress effects on, Glycine max 1499.
nutrient dynamics, carbon, nitrogen, Rhizobium, hydrogen production, Vigna unguiculata 4247.
nutrient sources, agricultural ecosystems, Inga jinicuil, Coffea 3226.
Oryza sativa, Sesbania rostrata manure effects on 4240.
paddy fields soil, pesticides effects on, heterotrophic bacteria 619.
Parasponia rigida, oxygen uptake, nodulation, Rhizobium 3243.
Paspalum notatum var. batatais 4246.
Phaseolus vulgaris, planting density effects on 6963.
Pisum sativum, symbiosis, Rhizobium leguminosarum 7852.
plants nodules, association Rhizobium japonicum 1511.
plasmids transfer, bacteria, conferences 5452.
Pseudomonas, rhizosphere, Deschampsia caespitosa 9597.
Pseudomonas, rhizosphere, Oryza sativa 9596.
rain forests 2307.
relationship photosynthesis, seeds yield, Glycine max 6984.
Rhizobium, books 9996.
Rhizobium inoculation, yield, Calopogonium caeruleum 9617.
Rhizobium japonicum, Cajanus cajan nodules hydrogen release 7858.
Rhizobium japonicum, carbon dioxide enrichment effects on, Glycine max 4248.
Rhizobium japonicum, effects on Glycine max yield 7000.
Rhizobium japonicum, irrigation, soil moisture, yield, Glycine max 6993.
Rhizobium mutants, photosynthesis, yield, Glycine max 9579.
Rhizobium japonicum nodulation, Glycine max, assays methodology 8690.
Rhizobium japonicum symbiosis Glycine max, salinity effects on 7830.
Rhizobium, Leguminosae growth, solar radiation effects on 5115.
Rhizobium, Leguminosae, herbicides application effects on 8688.
Rhizobium leguminosarum, acetylene reduction relationship hydrogen gas production, Pisum sativum 9585.
Rhizobium leguminosarum nodulation, association, Pisum sativum genotypes 5951.
Rhizobium leguminosarum, relationship, plasmid pJ1008 transfer 595.
Rhizobium leguminosarum, Strophostyles helvola defoliation effects on 5127.
Rhizobium leguminosarum symbiosis Pisum sativum, hydrogen recycling effects on 3229.
Rhizobium melioli, Medicago 2377.
Rhizobium melioli, nitrogen levels, genotypes, Medicago sativa 605.
Rhizobium melioli, photosynthesis carbon sources effects on, Medicago sativa 9578.
Rhizobium, nitrogen-15 distribution, bacteroids, nodules, Leguminosae 9615.
Rhizobium, nodulation, inoculation, Vicia angustifolia, Vicia villosa 6992.
Rhizobium, nodules, bacteroids structure, Medicago sativa 9613.
Rhizobium phaseoli, glutamine synthetase, nitroreductase, nodules, Phaseolus vulgaris 6985.
Rhizobium phaseoli, inoculation, Phaseolus vulgaris, land reclamation, mines 5108.
Rhizobium phaseoli, phosphorus uptake, Glomus fasciculatus, Phaseolus vulgaris 1502.
Rhizobium, salinity, effects on, growth, soil 597.
Rhizobium, seeds inoculation, Arachis hypogaea 9591.
Rhizobium, strains, inoculation, host range, Glycine max, Vigna mungo, Vigna unguiculata, 8679.
Rhizobium, symbiosis, Hedysarum coronarium, Israel 5947.
Rhizobium trifolii mutants, soil 2354.
Rhizobium trifolii, symbiosis, Trifolium repens 7003.
Rhizobium trifolii, Trifolium incarnatum, heritability 7829.
Rhizobium, Trifolium subterraneum, Medicago truncatula 2366.
Rhizobium, utilization carbon sources, photosynthesis, energy budget, Glycine max 9603.
Rhizobium, Vigna, roots, shoots, genotypes 3234.
rhizosphere, genetic analysis, Oryza sativa 8682.
rhizosphere microorganisms, Triticum aestivum roots exudates effects on 4237.
rhizosphere sediments, sulfate-reducing bacteria, Zostera marina 2356.
Rhodospirillum rubrum sphaeroides 13p, denitrificans, denitrification effects on 5125.
roots nodules, ammonium effects on, Alnus incana 3220.
soil amendment, urine, urea, Trifolium repens, pasture 3240.

Nitrogen fixation, (continued)

- soil, bacteria, USSR 2361.
soil chemistry, acidity, agricultural land, Leguminosae 5956.
soil microorganisms, comparison Leguminosae 601.
soil microorganisms, detection, use, acetylene reduction 2373.
soil microorganisms, pollution effects, 2,4-D, pesticide residues 9621.
soybean mosaic virus, effects on, Glycine max, Glycine soja 8533.
Trifolium incarnatum genotypes, relationship, Rhizobium trifolii strains nodulation 7847.
Trifolium incarnatum, lines variation, Rhizobium trifolii experimental infection 430.
Trifolium repens, acetylene reduction, diurnal variations 609.
Trifolium repens, association Rhizobium host range specificity 602.
Trifolium repens, nitrogen fertilizers effects on 2364.
Trifolium repens, nitrogen-fixing bacteria, grasslands, pollution effects, heavy metals, Trifolium repens 8686.
Trifolium repens, Trifolium pratense, pasture 6981.
Typha angustata, assays, India 7851.
Vicia faba nodules, Rhizobium 3231.
Vigna mungo, Rhizobium, relationship, hydrogen uptake 7002.
Vigna unguiculata, cowpea banding mosaic virus infection effects on 5691.
Zea mays, roots, stems 8699.
Zostera marina, roots, rhizomes 8698.
- Nitrogen (liquid),**
cryopreservation, fungi, methodology 6345.
freezing, storage, yeasts, culture collections 8150.
fungi, storage, culture collections 4540.
storage, Diplocarpon rosae conidia 3629.
- Nitrogen reductase,**
Bacteroides fragilis, purification, characterization 8267.
- Nitrogen removal,**
industries waste water, phosphorus treatment 5319.
- Nitrogen sources,**
ammonium, continuous culture methodology, Mycobacterium avium 8114.
analysis, Rhodospirillum rubrum illumination, hydrogen production 8366.
Aspergillus, nitrification, soil 9584.
Azospirillum brasilense, effects on acetylene reduction 7838.
Azospirillum flavum, Corynebacterium glutamicum, lysine biocynthesis 3656.
crop residues decomposition, soil microorganisms, uptake, triticum aestivum 7001.
ectomycorrhizas, absorption, nutrient transport, trees 9505.
effects on Acremonium chrysogenum, cephalosporin C, proteinase, biosynthesis 6140.
effects on biochemical oxygen demand determination 9802.
effects on, Erwinia chrysanthemi, leaf blight, Phlodonend selitum 1298.
effects on Nocardia fructifer biosynthesis, ristomycin, proteinase, pigments 2590.
effects on Rhodotorula gracilis lipids biosynthesis 7464.
gelatin hydrolysis, proteinase, Aspergillus sojae 8309.
Geotrichum candidum, triacylglycerol lipase production 7320.
glutamic acid, Gluconobacter suboxydans, glutamine synthase characterization 5526.
metabolism, yeasts, soil isolates 5897.
mycorrhizas, absorption, nutrient transport, Ericales 9538.
Phanerochaete chrysosporium, effects on cellulose biodegradation 3770.
Phanerochaete chrysosporium, effects on lignin biodegradation 2880.
soil microorganisms, urea fertilizer applications, nitrification 5968.
Zea mays, Azotobacter chroococcum inoculation soil, nitrogen fixation 4232.
- Nitrogen-fixing bacteria,**
activity, Gramineae, acetylene reduction 1497.
Alnus rubra nodules, measuring techniques, acetylene reduction, gas exchange 1496.
antibacterial activity, pesticides, Eichloria crassipes isolates 8770.
Azotobacter chroococcum, symbiosis, Cypripedium 5948.
foliar applications, Oryza sativa, paddy fields 5121.
growth, enumeration, isolation, Oryza sativa rhizosphere, spermosphere use 3616.
inoculation, nitrogen fixation, Lupinus 5952.
inoculation, Sorghum bicolor seedlings roots, carbon compounds exudates 4243.
Leguminosae nodulation, conferences 7004.
localization, Spartina alterniflora roots, salt marshes 6987.
Lupinus angustifolius, nodules, cobalt effects on 3241.
nodules, effects on nitrogen-fixing bacteria 3241.
nitrogen fixation, Paspalum notatum var. batatais 4246.
nitrogen fixation, phyllosphere 9590.
nitrogen fixation, Prosopis glandulosa, deserts 3210.
nitrogen fixation, rhizosphere, conferences 10008.
nitrogen fixation, rhizosphere, genetic analysis, Oryza sativa 8682.
nitrogen fixation, roots nodules, ammonium effects on, Alnus incana 3220.
nitrogen fixation, soil, forests ecosystems, reviews 9511.
nitrogen fixation, Zea mays, roots, stems 8699.
nitrogen fixation, Zostera marina, roots, rhizomes 8698.
organic matter decomposition, antibiotics effects on 5922.
phylosphere distribution, Glycine max, Vicia faba, factors affecting 5957.
rhizosphere, counting methods, identification, taxonomy 9593.
rhizosphere, crops 9592.
rhizosphere, Gramineae 9600.
rhizosphere microorganisms, role, nitrogen nutrition, Triticum aestivum 7006.
rhizosphere, nitrogen fixation, genetic analysis, crops 9604.
rhizosphere, nitrogen fixation, orchards, Artocarpus heterophyllus, Areca 9595.
rhizosphere, nitrogen fixation, Sorghum bicolor, Pennisetum americanum 9612.
soil isolates, nitrogen fixation, cobalt stimulation 3236.
species composition, deserts, Egypt, Arab Rep., nitrogen fixation efficacy 9607.
symbiosis, Cratylia floribunda, growth stage effects on 3232.
symbiosis, Zea mays, screening 7008.
Trifolium repens nitrogen fixation, grasslands, pollution effects, heavy metals 8686.
Vicia faba, giberellic acid effects on 9601.
- Nitrogen-15,**
distribution, measuring techniques, nitrogen fixation 9610.
distribution, bacteroids, nodules, Leguminosae 9615.
measuring techniques, nitrogen fixation, Azotobacter paspali, rhizosphere, Paspalum notatum 9609.
measuring techniques, nitrogen fixation, Glycine max, Vicia faba, field trials 9611.
measuring techniques, nitrogen fixation, rhizosphere 9608.
soil microorganisms, biomass labelling, degradation, nitrogen cycle 2339.

Nitrogenase

- activity, Frankia strains, nitrogen fixation, plants nodules 4239.
- activity, Glycine max, nodules, Rhizobium japonicum 7010.
- activity, Rhizobium japonicum, roots exudates, Glycine max, Vigna unguiculata 9612
- activity, Oryza sativa roots 8695.
- activity, Rhizobium japonicum, roots exudates, Glycine max, Vigna unguiculata 3225.
- activity, Rhizobium leguminosarum nitrogen fixation, Strophostyles helvola defoliation effects on 5127.
- activity, Rhizobium mutants, Cicer arietinum 7854.
- activity, Rhizobium, nodules, relationship extracellular polymers, Vigna radiata, Cicer arietinum 8678.
- activity, Rhodopseudomonas capsulata, genetic control 19.
- activity, soil, effects on acetylene reduction conversion factors, comparison, nitrogen fixation 7005.
- bacteria, assays, immunofluorescence 930.
- biosynthesis, Rhodopseudomonas palustris, relationship, culture concentration Rhodopseudomonas capsulata 3687.
- Clostridium pasteurianum, cofactors, iron, molybdenum, sulfur, levels 4593.
- ethylene activation, molybdenum-iron protein E.S.R., Klebsiella pneumoniae 5523.
- genes, transcription, Rhizobium meliloti, nodulation, Medicago sativa 3228.
- iron protein, iron-sulfur centers content, activity, Azotobacter vinelandii 7420.
- iron protein, radioactive labeling, Rhodopseudomonas capsulata 3693.
- Klebsiella pneumoniae nitrogen fixation 1495.
- Klebsiella pneumoniae, nitrogen fixation, activity, mechanisms 5935.
- purification, characterization, nitrogen fixation, Azospirillum brasilense 6505.
- redox properties, Azotobacter vinelandii 9162.
- Rhizobium japonicum, Glycine max nodules, nitrite, nitric oxide, effects on 1501.
- Rhizobium phaseoli, nitrogen fixation, nodules, Phaseolus vulgaris 6985.
- subunits composition, activation, inactivation effects on, Rhodospirillum rubrum 76.

2-Nitronaphthofuran

- derivatives, antiviral activity, Rous sarcoma virus transformation, chickens embryo cells 3362.

n-Nitrophenol

- biodegradation, Bacillus, Pseudomonas 2013.

1-Nitropyrene

- transformation, anaerobic bacteria, intestinal microflora, man 2024.

1-Nitropyrene reductase

- assays, fluorometry, Salmonella typhimurium 5021.

Nitrosococcus oceanus

- methane oxidation 4267.

Nitrosofungin

- Streptomyces plicatus, synthesis 9791.

Nitrosomonas

- carbaryl, naphthol, inhibition, nitrification 7007.
- nitrification inhibition, rhizosphere, Juniperus procera, forests 3223.

Nitrosomonas europaea

- cytochrome c multiple forms, purification, characterization 5479.
- cytochrome c oxidase, purification, characterization 6524.
- hydroxylamine oxidase, mechanisms, heme P-450 reaction carbon monoxide, hydrogen peroxide 8282.
- immobilized cells, nitrification, ammonium oxidation 9063.
- methane oxidation 4267.
- nitrification, acetylene effects on 594.
- nitrification, soil reactors 2357.
- +Nitrobarb winogradskyi, mixed culture, nitrification, sodium chlorate, sodium nitrite, effects on 5106.

Nitrous acid

- extraction, +agglutination, diagnosis, Streptococcus pharyngitis, man 9905.

Nitrous oxide

- biosynthesis, microorganisms 1968.
- measuring techniques, soil denitrification, temperature association 612.
- production, denitrification, fertilizer applications, soil properties, grasslands 85.
- reduction, soil properties, redox potential, soil pH 8703.

Nitrous oxide reductase

- purification, characterization, Pseudomonas perfectomarinus 916.

Nizin

- adsorption, silica 8019.
- Streptococcus lactis, biosynthesis, inactivation 2587.

Nocardia

- ansamitocin biosynthesis 4422.
- antibacterial activity, β -lactam antibiotics 2503.
- antibiotic sensitivity testing, aminoglycoside antibiotics, β -lactam antibiotics 2517.
- biodegradation, PCB 2895.
- biosynthesis, antibiotic X-14968 6208.
- cycloheptanone biodegradation 2014.
- epoxidation, propylene, metabolism 7462.
- fungicides biodegradation 4763.
- hydroxymethylglutaryl-CoA reductase (NADPH) inhibitor hydroxylation 8455.
- like, Mycobacterium isolation, soil, Zaire 3193.
- media (culture) effects on cholesterol biodegradation 2893.
- pristane conversion pristano 5994.
- pristane metabolism characterization, pristano biosynthesis 4720.
- Rhodococcus, identification, use, biochemistry, sensitivity 671.
- siderochelin A isolation 1651.
- steroid 9 α -monooxygenase, purification, characterization 976.

Nocardia asteroides

- β -lactam antibiotics, antibiotic sensitivity testing 3384.

Nocardia erythropolis

- enzymes, steroids biodegradation 1948.

Nocardia fructifera

- proteinase isolation, characterization 9186.

- biosynthesis, ristomycin, proteinase, pigments, nitrogen sources, carbon sources, effects on 2590.

Nocardia mediterranei

- recombinants, rifamycins biosynthesis 6164.
- rifamycin B biosynthesis, pH effects on 6165.
- rifamycins derivatives biosynthesis, association 4-substituted 3-amino-5-hydroxybenzoic acid 1628.

Nocardia opaca

- lensulfithion biodegradation 7538.

Nocardia paraffinica

- methylketone, production, association, alcohols 7460.

Nocardia restricta

- alcohol conversion, (12Z)-14bda-12,14-dien-17 α -oic acid 6617.
- lactamides, alkaloids, I.R. spectroscopy 8373.

Nocardicin

- Actinosynnema mirum biosynthesis 6200.

Nocardicin A

- +meclizine, antibacterial activity, cytolysis, inhibition protein biosynthesis, Escherichia coli 2555.

Nocodazole

- specificity, cell cycle, Schizosaccharomyces pombe 690.

Noctuidae

- biological control, Bacillus thuringiensis 5559.
- biological control, baculovirus 998.
- pest control 1041.

Nodes

- Oryza sativa, basal rot, Fusarium oxysporum, pathogenicity 3951.

Nodulation

- Alnus glutinosa, Frankia, actinorrhizas, growth 5967.
- Arachis hypogaea, genetic analysis, Rhizobium 7015.
- Arachis hypogaea, seedlings, Cercospora arachidicola leafspot effects on 341.
- Cicer arietinum, Rhizobium mutants 7854.
- Elaeagnus umbellata, nitrogen fixation, soil amendment, calcium hydroxide effects on 1506.
- Glycine max, association, Rhizobium intraspecific relationships 9605.
- Glycine max, nitrogen assimilation association 606.
- Glycine max, Rhizobium japonicum characterization, sodium chloride tolerance 59.
- Glycine max, Rhizobium japonicum, nitrogen fixation efficiency 7833.
- Glycine max, tillage effects on 5130.
- Leguminosae, nitrogen-fixing bacteria, conferences 7004.
- Leguminosae, Rhizobium phaseoli, strains competition 4245.
- Lens esculenta, Rhizobium leguminosarum competitiveness 3235.
- Lucania leucocarpa, rhizosphere microorganisms, Rhizobium 5959.
- light wavelength effects on, Trifolium repens 9589.
- Macrotyloma uniflorum, isolation, screening, Rhizobium 2360.
- Medicago sativa, Lotus corniculatus, Rhizobium soils inoculation 5128.
- Medicago sativa, Rhizobium meliloti, auxotrophy mutants, adenine nutrient requirements 9616.
- Medicago sativa, Rhizobium meliloti, nitrogenase, genes, transcription 3228.
- Medicago sativa, Rhizobium meliloti strains competition association 7857.
- metham fumigation inhibition, Glycine max 3251.
- mung bean yellow mosaic virus infection inhibition, Vigna radiata 1144.
- nitrogen fixation, Alnus rubra, interaction Populus, biomass, mixed culture, silviculture 9512.
- nitrogen fixation, fast-growing Rhizobium japonicum, Glycine soja 4249.
- nitrogen fixation, mixed culture, Arachis hypogaea, Graminaeae 4250.
- nitrogen fixation, phosphorus fertilizer applications, shading effects on, Inga jinicuil 7843.
- nitrogen fixation, Rhizobium, carbon sources utilization, photosynthesis, Vicia faba 615.
- nitrogen fixation, Rhizobium meliloti, light intensity, carbon dioxide, concentration effects on, Medicago sativa 9586.
- pH, effects on, Rhizobium meliloti, Medicago sativa 3238.
- Rhizobium, Aeschynomene stems, characterization 7836.
- Rhizobium, Cajanus cajan, yield, growth 9606.
- Rhizobium, Cicer arietinum, growth, nitrogen fixation 6989.
- Rhizobium, Galega infection, taxonomic significance 8696.
- Rhizobium, Glycine max, Glycine soja, Vigna unguiculata 3230.
- Rhizobium, growth rate, competition, temperature effects on, Vigna unguiculata 9588.
- Rhizobium inoculation, nitrogen fixation, Vicia angustifolia, inoculation 6992.
- Rhizobium isolates, Cajanus cajan, Cicer arietinum 7821.
- Rhizobium japonicum, effects on pathogenicity, Phytophthora megasperma 1-so, glycinea, root growth 5689.
- Rhizobium japonicum, Glycine max, nitrogen fixation assays, methodology 8690.
- Rhizobium japonicum, host range, cultivars, Glycine max 7841.
- Rhizobium japonicum, induction chlorosis, Arachis hypogaea 7828.
- Rhizobium japonicum, rye capsules polysaccharides, Glycine max 3237.
- Rhizobium japonicum, symbiosis, Glycine max 8701.
- Rhizobium japonicum, yield, Glycine max 9580.
- Rhizobium, Leguminosae, herbicides application effects on 8688.
- Rhizobium, leguminosae roots ethylene biosynthesis, sulfur fertilizers effects on 1503.
- Rhizobium leguminosarum, nitrogen fixation, association, Pisum sativum genotypes 5951.
- Rhizobium leguminosarum nitrogen fixation, Strophostyles helvola defoliation effects on 5127.
- Rhizobium leguminosarum, relationship, plasmid pJ1008 transfer 595.
- Rhizobium, Medicago sativa, association, Fusarium oxysporum infection 5114.
- Rhizobium, nitrogen fixation, Parasponia rigida, oxygen uptake 3243.
- Rhizobium phaseoli, Phaseolus vulgaris, Pseudomonas syringae subsp.phaseolicola halo blight effects on 7652.
- Rhizobium phaseoli, specificity, Phaseolus coccineus, Phaseolus vulgaris 598.
- Rhizobium, seeds inoculation, Arachis hypogaea 9591.
- Rhizobium, soil amendment effects on, yield, Glycine max 9582.
- Rhizobium trifolii, ammonium nitrate tolerance effects on 7855.
- Rhizobium trifolii strains, Trifolium incarnatum genotypes, relationship nitrogen fixation 7847.
- Rhizobium trifolii, Trifolium repens, hydrogen, gas production 3245.
- Rhizobium, Vigna sinensis, phoric acid effects on 4251.
- root hairs, role indole-3-acetic acid, Rhizobium, Leguminosae 1509.
- soil pH, phosphorus effects on, Alnus glutinosa 555.
- Trifolium repens, Rhizobium trifolii strains, inoculation 608.
- Trifolium subterraneum, competition, Rhizobium trifolii 5116.
- Vigna unguiculata, cowpea breeding mosaic virus infection effects on 5691.
- Vigna unguiculata, Phaseolus vulgaris, crop rotation, growth 1504.
- yield, bacteria infection effects on, Trifolium repens, Medicago sativa, Cicer arietinum 2226.

Nodules

- actinorrhizas, nitrogen fixation, seasonal variations, diurnal variations, soil temperature effects on, Canethus velutinus 9513.
- Alnus, Actinomyces isolation, antibiotic sensitivity testing 864.
- Alnus glutinosa, plasmids, Frankia 560.
- Alnus incana, nitrogen fixation, ammonium effects on 3220.

Nodules, (continued)

- Alnus rubra*, nitrogen-fixing bacteria, measuring techniques, acetylene reduction, gas exchange 1496.
- Basidiomycetes, ectomycorrhizas, *Rubus* 3208.
- Cajanus cajan*, hydrogen release, *Rhizobium japonicum* nitrogen fixation 7858.
- Cicer arietinum*, *Rhizobium symbiosis* effects on 5966.
- Glycine max, enzymes effects on nitrogen fixation, *Rhizobium japonicum* 8694.
- Glycine max, nitrification, nitrate effects on 8693.
- Glycine max, *Rhizobium japonicum* antibiotic resistance isolates 651.
- Glycine max, *Rhizobium japonicum*, hydrogen metabolism 6979.
- Glycine max, *Rhizobium japonicum*, hydrogen uptake effects on nitrogen fixation 7009.
- Glycine max, *Rhizobium japonicum*, nitrogenase activity, protein biosynthesis 7010.
- Glycine max, *Rhizobium japonicum* nitrogenase, nitrite, nitric oxide, effects on 1501.
- Lupinus angustifolius*, nitrogen-fixing bacteria, cobalt effects on 3241.
- Medicago sativa, *Rhizobium meliloti*, transposon 5, mutants, ultrastructure 7848.
- nitrogen fixation, respiration, water stress effects on, Glycine max 1499.
- nitrogen-15 distribution, nitrogen fixation, *Rhizobium*, *Leguminosae* 9615.
- Pisum sativum*, cytokinins levels, *Rhizobium leguminosarum* 5120.
- plants, nitrogen fixation, association *Rhizobium japonicum* 1511.
- plants, nitrogen fixation, Frankia strains nitrogenase activity 4239.
- Rhizobium*, bacteroids structure, nitrogen fixation, enzymes, Medicago sativa 9613.
- Rhizobium*, hydrogenase activity, *Leguminosae* 7837.
- Rhizobium meliloti*, development, nitrate effects on, Medicago sativa 3239.
- Rhizobium phaseoli* nitrogen fixation, glutamine synthetase, nitrogenase, *Phaseolus vulgaris* 5985.
- Rhizobium trifolii* bacteroids, scanning electron microscopy, *Trifolium repens* 8676.
- roots, nitrogen fixation, Myrica gale, oxygen concentration 7859.
- Trigonella foenum-graecum*, ammonia assimilation, bacteroids, nitrogen fixation 3242.
- ultrastructure, Glycine max roots, *Rhizobium japonicum* infection 3928.
- Vicia faba, *Rhizobium*, nitrogen fixation 3231.
- Nodulospirillum**,
fungal flora, *Fagus grandifolia* bark 1438.
- Nomurea rileyi**,
pathogens, biological control, *Lepidoptera* 1010.
- Non-fermentative gram-negative bacteria**,
antibacterial activity, ciprofloxacin 9661.
- clinical isolates, Identification, API test, Oxi-Ferm tube test, Minitek test 9019.
- identification methodology 9903.
- Nontarget organisms**,
Bombyx mori, baculovirus pathogenicity, biological control 9207.
- pathogens, biological control, safety regulations, *Mammalia* 1025.
- Norovirus**,
antiviral activity, influenza virus, chick embryos 9692.
- Norfloxacin**,
antibacterial activity 2426.
- antibacterial activity 2440.
- antibacterial activity 2453.
- antibacterial activity 8760.
- antibacterial activity, comparison, nalidixic acid, cinoxacin, oxolinic acid, *Pseudomonas aeruginosa*, *Staphylococcus aureus* 5197.
- antibacterial activity, *Enterobacteriaceae* 9636.
- antibacterial activity, *Enterobacteriaceae*, gram-positive cocci 7924.
- antibacterial activity, gastrointestinal tract clinical isolates 2455.
- antibacterial activity, gram-negative bacilli 7062.
- antibacterial activity, gram-negative bacilli bacteriuria isolates, man 7073.
- antibacterial activity, gram-positive bacteria, gram-negative bacteria 7057.
- antibacterial activity, *Neisseria gonorrhoeae*, gram-negative bacteria, gram-positive bacteria 2432.
- antibacterial activity, *Pseudomonas aeruginosa* 9662.
- antibacterial activity, *Pseudomonas aeruginosa*, *Staphylococcus* 7091.
- antibacterial activity, urinary tract clinical isolates, norfloxacin 9671.
- antibiotic resistance, *Pseudomonas aeruginosa*, *Escherichia coli*, media (selective) 2404.
- antibiotic sensitivity testing, quality control 9672.
- disc-diffusion test, standardization 3324.
- Norieueine**,
+tyrosine, media (culture), Identification, *Clostridium difficile* 9907.
- North America**,
comparison, Europe, *Verticillium albo-atrum*, virulence, Medicago sativa, field trials 8558.
- deserts, soil, cryptogams characterization 5887.
- isolation, potato virus S strains, Aphididae disease transmission, association, *Chenopodium quinoa* 6829.
- Norwalk agent**,
food poisoning, oysters, man, gastroenteritis 1072.
- gastroenteritis, water-borne diseases, man, drinking water 2633.
- infection, man, association swimming, disease transmission, epidemiology 1710.
- infection, man, gastroenteritis, association swimming, epidemiology 1709.
- Norway**,
meat industry, carcasses, bacteria food contamination 5618.
- Nox**,
clinical isolates, *Staphylococcus aureus*, antimicrobial agents sensitivity 3313.
- sprays, thimerosal preservatives, *Pseudomonas cepacia* survival 7118.
- Nosocomial environments**,
airborne microorganisms, fungi 5340.
- airborne microorganisms, infection, man 2636.
- clinical isolates, trimethoprim drug resistance 2399.
- man, vancomycin, airborne microorganisms, disease spread 3490.
- medical equipment, respirators, bacteria contamination 9823.
- sanitation, disinfectants aerosols 806.
- Staphylococcus aureus*, antibiotic resistance, methicillin 3301.
- Nosocomial infection**,
association, *Enterobacteriaceae* drug resistance, R factors analysis 1541.
- association, man, disinfection, hospitals 3508.
- bacteria, man, disease control, environmental hygiene 3495.
- bacteria, urinary tract, incidence, man, environmental hygiene 8074.
- clinical isolates, *Pseudomonas aeruginosa* pyocine typing 1781.
- man, association medical equipment, reviews 2639.

Nothofagus,

mycorrhizas, New Zealand 7774.

Novobiocin,

- adsorption, carbon (activated), association purification 6230.
- antibacterial activity, pH effects on 6228.
- antibacterial activity, *Staphylococcus*, clinical isolates 8804.
- antibiotic sensitivity testing, *Staphylococcus saprophyticus* 8879.
- bacteria cell injury 5280.
- biosynthesis, actinomycetes, role nuclease, proteinase, α -amylase 7123.
- drug resistance, *Aeromonas salmonicida* subsp. *salmonicida*, temperature effects on 6161.
- effects on ethylene production, soil microorganisms 5907.
- inhibition, replication, cytomegalovirus infected embryo fibroblasts 2489.
- media (selective), *Salmonella* 3596.

Noxythiolin,

antibacterial activity 6040.

Nuclear Overhauser effect,

Heliothosphonium carbonum cyclic peptides toxins, conformation 7818.

tetrahydrofolate dehydrogenase binding NADP⁺, thioNADP⁺, *Lactobacillus casei* 2785.

Nuclear polyhedrosis virus,

- Autographa californica*, enzyme-linked immunosorbent assay detection, in vivo, in vitro 8104.
- biological control, adjuvants, efficacy, *Heliothis* zea 6595.
- biological control, *Adoxophyes orana*, association granulosis virus effects on 9213.
- Cydia pomonella* 8354.
- biological control, *Adoxophyes orana* larvae 8358.
- biological control, *Heliothis* zea 996.
- biological control, Insecta, control programs 9212.
- biological control, Insecta, safety studies, animal models 4710.
- biological control, *Oporophora brumata* 9213.
- biological control, *Orygia pseudotsugata*, *Pseudotsuga menziesii* 8352.
- biological control, pest control, *Lymantia dispar* 7476.
- biological control, *Trichoplusia ni*, *Brassica oleracea*, crop fields 6596.
- delta-methrin, synergism, biological control, *Mamestra brassicae*, *Spodoptera littoralis* 3208.
- epizootology, soil, *Mamestra brassicae* 1470.
- Heliothis* zea, pest control, *Heliothis* 1041.
- identification, use, monoclonal antibodies, methodology 2652.
- infection, enzyme-linked immunosorbent assay detection, *Trichoplusia ni* 2656.
- infection, *Heliothis amigerica* conchitus, rearing methodology 1738.
- infection, transmission, eggs, hatchability, *Hyphantria cunea* 1044.
- isolation, methodology, soil 1763.
- pathogens, sprays, adjuvants, biological control, *Heliothis* zea 5547.
- pest control, *Heliothis virescens*, *Cicer arietinum* extracts, feeding behavior stimulants 6598.
- U.V. radiation inactivation, effects on infectivity, *Lymantia dispar* 2487.
- U.V. radiation protection virulence, pest control, biological control, *Lymantia dispar* 7475.

Nuclease,

- role antibiotics biosynthesis, actinomycetes 7123.
- Staphylococcus aureus*, thermal stability, role viability, food processing 266.
- Nucleation**,
ice, frost damage, bacteria, plants 4130.

Nuclei,

- ice, activation, bacteria, cryoinjury, *E. coli*, *Erwinia herbicola*, biological control 8643.
- ice, activation, biological control, *Erwinia herbicola*, inhibition, *Pseudomonas syringae*, cryoinjury, *E. coli*, *E. coli* 8642.
- ice, formation, activity, smoke, effects on, *Pseudomonas syringae* pv. *syringae*, *Erwinia herbicola* 8527.
- Nucleic acid-binding protein**,
amino acid sequence, bovine leukemia virus 7297.

Nucleic acids,

- hybridization analysis, antiviral agents activity measurement, cytomegalovirus DNA biosynthesis 8798.
- levels, mushrooms, mushroom poisoning relationship 1961.
- metabolism, *Solanum tuberosum*, potato virus X infection effects on 2187.
- potato spindle tuber viroid, extraction methodology, gel electrophoresis 8101.
- substances identification, *Streptomyces aureofaciens* 8202.

Nucleoproteins,

yeasts, separation techniques, RNA, proteins 9119.

Nucleoside monophosphate kinase,*Saccharomyces cerevisiae*, purification, characterization 6513.**Nucleosides**,

- analogs, antiviral activity, cytomegalovirus 9687.
- analogs, antiviral activity, Epstein-Barr virus replication 9688.
- analogs, inhibition viruses replication 3352.

5'-Nucleotidase,use, inosine biosynthesis, *Bacillus subtilis* mutants 122.**Nucleotide sequence**,

- gemivirus DNA clones, role, *Nicotiana benthamiana* infectivity 9370.
- homology, *Bacteroides*, clindamycin resistance 6013.

Nucleotides,

- biosynthesis, *Propionibacterium shermanii* immobilized cells 113.
- injection, high-pressure liquid chromatography, bacteria 876.
- insertion, yeasts, mutants, methodology 1808.
- tobacco mosaic virus antiviral activity, biosynthesis simulation, antiviral agents, α -interferon, *Nicotiana glauca*, *Nicotiana tabacum* 7746.

Nutrient availability,

- effects on bacteria, cooling water systems surfaces contamination 4451.
- effects on pathogenicity, *Gaeumannomyces graminis* var. *tritici*, take-all, *Triticum aestivum* 3013.
- environmental stress, competition, sclerotia germination, fungi, soil 9573.
- metals, chelates, sewage sludge, digestion (anaerobic) 8947.
- phosphorus, effects on endomycorrhizas, colonization, growth, *Malus pumila*, *Allium porrum*, *Tagetes patulus* 9543.
- phosphorus, *Glomus fasciculatus* uptake, carbohydrates levels, roots, *Trifolium subterraneum* 9573.
- phosphorus, nutrient uptake, endomycorrhizas, *Malus pumila*, *Allium porrum*, *Tagetes patulus* 9544.
- sulfur, soil microorganisms, leaf litter decomposition, acid rain, pollution effects 9507.
- Nutrient balance**,
soil microorganisms, soils (organic), forests 9514.

Subject Index

Nutrient concentrations.

Vibrio ecological distribution, coastal waters 6259.

Nutrient cycles.

Acacia holosericea stands, association endomycorrhizas 535.
Basidiomycetes, decomposition, roots, wood, *Quercus robur* 5861.
biomass, stands, mycorrhizas, fungi, *Pseudotsuga menziesii*, USA, Oregon 6905.
fungi, leaf litter, soil, ecosystem analysis, reviews 5889.
soil, mathematical models, books 5448.
soil microorganisms, mineralization, sulfur, nitrogen, soil 6996.
soil microorganisms, pollution effects, climatic change, carbon dioxide 9563.
soil microorganisms, succession, forests, montane environments 2297.
soil organic matter accretion, biological activity, mudflats, USA, California, marine environments 9586.
soil, sulfate-reducing bacteria, flooded soils, paddy fields 6958.

Nutrient deficiencies.

phosphates, batch culture, *Streptomyces griseus* streptomycin production 4383.

Nutrient deficiency.

Pinus, fertilizer applications effects on mycorrhizas, saprophytes, soil 7775.

Nutrient dynamics.

association, *Streptomyces rimosus* oxytetracycline biosynthesis 6183.
carbon, nitrogen, Rhizobium, hydrogen production, *Vigna unguiculata* 4247.
decomposition, *Pseudotsuga menziesii* 516.
detritus, leaf litter, forest floor, *Pinus contorta* subsp. *latifolia*, USA, Wyoming 4139.

leaf litter decomposition, forests, *Pinus sylvestris*, Sweden 2300.

leaf litter decomposition, mineralization, forests 2234.

leaf litter decomposition, forests, floodplains, USA, Illinois 6890.

nitrogen balance, leaf litter decomposition, *Pinus sylvestris* 3161.

nitrogen cycle, plantations, *Theobroma cacao* 3222.

nitrogen mineralization, forests, disturbance 6901.

nitrogen-fixing bacteria, nitrogen fixation, decomposition, *Pseudotsuga menziesii* 516.

soil microorganisms decomposition, *Acer rubrum* leaf litter, flooding 4194.

soil properties, nitrogen mineralization, forests 6895.

trophic relations, forests, steppes 1448.

Nutrient enrichment.

effects on *Carsonella* debris biodegradation, USA, Alaska, lakes 2023.

effects on *Saccharomyces carlsbergensis* ethanol production 8408.

relationship, pH, tolerance, *Yersinia enterocolitica*, isolation, methodology 8475.

Nutrient levels.

soil, nitrogen, mineralization, bogs, particle size, soil microorganisms 8697.

Nutrient loss.

soil microorganisms, measuring techniques, microcosms 571.

Nutrient requirements.

adenine, Rhizobium meliloti, auxotrophy mutants, nodulation, *Medicago sativa* 9616.

Arctobacter globiformis glutamic acid production 4569.

bacteria, yeasts, dental plaque isolates, chemostats methodology 4497.

chloramphenicol, biosynthesis, *Streptomyces venezuelae* 6161.

citrinin, biosynthesis, *Penicillium citrinum* 2064.

Clostridium saccharolyticum, growth conditions, ethanol, production 5574.

Endothia parastica, media (culture), methodology 1814.

Fusarium oxysporum, enatin production 6206.

Hansenula polymorpha, carbohydrate composition, association, carbon dioxide

recycling, relationship, space flight, food, man 8486.

media (culture), Bacteroides, *Fusobacterium* 5415.

media, rumen microorganisms, counting methods, cellulose biodegradation 10007.

metals, sewage sludge, digestion (anaerobic) 8946.

nicotinic acid, *Sesbania rhizobium* 9577.

Ruminococcus flavefaciens, media (culture) 9891.

Saccharomyces cerevisiae, valine effects on, leucine conversion,

3-methyl-1-butanol biosynthesis 3724.

Saccharomyces fragilis, growth, proteins production 926.

Salmonella enteritidis, enterotoxins, biosynthesis 1105.

soil microorganisms, biodegradation, carbaryl, pesticide residues, flooded soils

9620.

tryptophan, mucidin biosynthesis, *Qudemansiella mucida* 8015.

valine, isoleucine, monensin biosynthesis, *Streptomyces cinnamonensis* 8016.

wood decay bacteria 3782.

wort, *Saccharomyces uvarum*, ethanol levels 7516.

Nutrient solution,

contamination, intravenous administration, microorganisms 5333.

Nutrient sources.

agricultural ecosystems, nitrogen fixation, *Inga jinicuil*, *Coffea* 3226.

alkanes, *Candida oleophila* biomass production, fermenters 7535.

carbohydrates, liquid culture, growth, *Beauveria bassiana*, *Metarhizium anisopliae*

4535.

dogs, microorganisms single-cell protein 3851.

molasses, wine fermentation sediments, *Candida*, single-cell protein production

5628.

nitrogen cycle, plantations, *Theobroma cacao* 3219.

phosphatidyl choline, degradation, mineralization, soil microorganisms, enzymatic

activity 5915.

phosphorus, mycorrhizas, seedlings, *Telephora terrestris* 1441.

potassium, soil, *Azotobacter* 7823.

regulation, *Flavobacterium heparinum*, production, heparin lyase 969.

starch, *Aspergillus oryzae*, lipids production 2855.

wood extracts, bacteria growth association 3.

Nutrient status.

association, *Escherichia coli*, threonine effects on valine sensitivity 3304.

effects on, immunogenicity, *Vibrio cholerae*, vaccines, chemostats 1686.

Nutrient transport.

absorption, ectomycorrhizas, carbon sources, nitrogen sources, trees 9505.

absorption, vesicular-arbuscular mycorrhizas, ectomycorrhizas, ecophysiology,

host plants, population ecology 9539.

carotovorin effects on, *Erwinia carotovora* 2589.

mycorrhizas, ecophysiology, absorption, nitrogen sources, phosphate, *Ericalea*

9538.

vesicular-arbuscular mycorrhizas, physiology, roots, host plants 9537.

Nutrient uptake.

Allium cepa, role, endomycorrhizas, association, soil salinity 7804.

Candida intermedia, fermentation 128.

Hordeum distichon, role, vesicular-arbuscular mycorrhizas, Denmark 5905.

mycorrhizas, conferences 10005.

phosphorus, nutrient availability, endomycorrhizas, *Malus pumila*, *Allium porrum*,

Nutrient uptake, (continued)

Tagetes patulus 9544.

Rhizobium meliloti inoculation effects on, soils (saline), *Medicago sativa* 7842.

Triticum aestivum growth, pathogens incidence, factors affecting 5725.

vesicular-arbuscular mycorrhizas, inoculum production, agricultural practices,

land reclamation 9540.

Zea mays, *Sorghum bicolor*, roots, role, *Azospirillum brasilense* 6988.

Nutrients.

removal, wastewater treatment, relationship, algae, plants growth 5329.

supplements, *Saccharomyces cerevisiae* nutritive value, association, *Brachionus*

plicatilis population growth 7604.

translocation, brown rust, *Hordeum vulgare* 3939.

Nutrition.

Agaricus bisporus, association, microorganisms biomass, straw composts 2923.

nitrate, effects on, viruses infected, *Malus pumila* 389.

nitrites, effects on cucumber green mottle mosaic virus replication, *Cucumis*

sativus 2183.

nitrites, effects on, *Fusarium oxysporum* f.sp. *lycopersici* wilt, *Lycopersicon*

esculentum 411.

potassium, effects on *Triticum* yield 371.

Pseudomonas paucimobilis, soil, relationship, nitrogen levels 4218.

Streptomyces vinaceus, *Streptomyces coelicolor*, genes, cloning 1523.

vitamins, animals, interaction *allatoxis* 4899.

Nutritional status.

Agropyron intermedium, smut, *Cochliobolus sativus*, effects on 8548.

Solanum tuberosum, *Phytophthora infestans* infection, sporulation 6801.

Nutritive value.

Agaricus bisporus, cultivation, lignocellulose degradation, reviews 7596.

Arthrobaacter simplex single-cell protein, rats, hydrocarbons, carbon sources

7597.

bacteria effects on corn meals 251.

breweries activated sludge, pigs feeds 5631.

cheese, production 2036.

culture, *Pleurout ostreatus*+*Erwinia carotovora*, effects on, *Triticum aestivum*,

straw, *Ruminantia* 254.

fungi, man 5515.

Macrolepiota zeyheri, *Agaricus brunneus*, characterization 3846.

microorganisms production lysine + wheat flour, rats 5632.

molds, grains, chickens 3852.

proteins products, cellulolytic bacteria growth, sugarcane bagasse 9287.

Saccharomyces cerevisiae, nutrients supplements, association, *Brachionus*

plicatilis population growth 7604.

Saccharomyces fragilis, single-cell protein, feeding trials, chickens 7608.

silage feeds, factors affecting 2927.

single-cell protein, *Aspergillus fumigatus*, *Manihot esculenta*, rats, pigs 2932.

yeasts single-cell protein, feeding trials, rats 8489.

Nuta.

Carya illinoensis, drop, *Cladosporium caryigenum* scab effects on 6929.

microscopy, spoilage, bibliographies 5034.

Nylon.

+enzyme-linked immunosorbent assay, use, detection, influenza virus 4468.

+silver fabrics, antimicrobial activity 3371.

Nymphaeodes peltata.

leaf litter, decomposition, *Pythium* 5070.

Nystatin.

antibiotic resistance, *Candida albicans*, clinical isolates, oral cavity

candidiasis 8746.

antibiotic resistance, sterol composition, plasma membranes, *Candida albicans*

3277.

antibiotic sensitivity testing, yeasts 2502.

antifungal activity, cell walls, *Candida albicans* 2477.

assays 8868.

comparison, tetrafungin, *Streptomyces albulus* subsp. *tetrafungini* biosynthesis

9771.

copper complex, physicochemical properties 8867.

extinction, *Streptomyces mycelia*, dimethyl sulfoxide use 8869.

physicochemical characteristics 6179.

physicochemical properties, acid-base state 6177.

resistance, *Candida albicans*, protoplasts fusion hybrids 658.

spectrophotometry 6178.

Streptomyces noursei, biosynthesis, glucose metabolism effects on 6176.

uptake, *Saccharomyces cerevisiae* 8008.

Oat sterile dwarf virus.

infection, cytology, *Avena sativa* 2164.

Occupational exposure.

Paeclomyces varioti proteins feeds, allergenicity, man 7807.

risks, pathogens, inactivation, land disposal, industrial wastes, reviews 5978.

sepsis, *Streptococcus*, meat industry, hygiene, man 2634.

Occupational hazards.

Salmonella contamination, sewage treatment plants 1730.

Ochratoxin.

Aspergillus ochraceus, biosynthesis, methionine derivatives effects on 7628.

grain dust, grain elevators 7619.

Ochratoxin A.

ammonia detoxification, grain 2063.

Aspergillus ochraceus, contamination, *Hordeum vulgare*, kidney, lesions, pigs

7622.

Aspergillus ochraceus, contamination, *Hordeum vulgare*, detoxification, feeding,

pigs 7623.

Aspergillus ochraceus, *Penicillium viridicatum*, occurrence, temperature, relative

humidity, effects on 7624.

biodegradation, *Phenyllobacterium immobile* 6656.

biosynthesis, *Aspergillus ochraceus*, *Penicillium viridicatum*, barley 1102.

biosynthesis, *Aspergillus sulphureus*, inhibition, growth, propolis role 9289.

biosynthesis, *Penicillium verrucosum* var. *cyclopium*, wheat 2062.

± citrinin, toxicity, chick embryos 2068.

contamination, feeds 3868.

metabolites, oxidation, role alcohol dehydrogenase 4894.

production, *Aspergillus ochraceus*, controlled conditions, atmospheric conditions

3861.

Ochroconia constricta,

pectin biodegradation 3776.

- Ocimum adscendens**, plant extracts, antifungal activity, *Helminthosporium oryzae* 691.
- Ocane**, utilization, *Pseudomonas aeruginosa* 7021.
- Ocitenidine dihydrochloride**, antibacterial activity, dental plaque isolates 3325.
- Octyl gallate**, antibacterial activity 7084.
- O,O-Dialkylidithiophosphoric acid**, derivatives, antimicrobial activity 7955.
- O,O-Dialkylthiophosphoric acid**, derivatives, antimicrobial activity 7955.
- O,O-Dimethyl phosphorodithioate**, pesticides (organophosphorus) derivatives, biodegradation, *Pseudomonas*, *Thiobacillus thioautotrophicus* 3787.
- Odium compounds**, Allium, induction, sclerotia formation, *Sclerotium cepivorum* 4001.
- Odors**, coryneforms, degradation, manure, pigs 8060.
- Odors**, compounds, biodegradation, *Pseudomonas*, *Bacillus*, *Corynebacterium* 5580.
- Oecanthus angustipennis**, vector-borne diseases relationship, *Cryptosporidiosis* canker, *Acer rubrum* 9524.
- Off flavor**, butter, psychrotrophic bacteria contamination, lipase 209.
- Off flavor**, formation, use sorbic acid preservatives, wine 7612.
- Off flavor**, β -D-galactosidase, fungi, skim milk yogurt production 7569.
- Off flavor**, milk, spoilage, bacteria 183.
- Off flavor**, milk, spoilage, proteinase, bacteria 4815.
- Oflazacin**, antibacterial activity, *Mycoplasma* 3311.
- Olfidodendron**, incidence, association, heavy metals gradients, soil, Sweden 6898.
- Olfidodendron truncatum**, antibiotic PR-1350, biosynthesis, characterization, antibacterial activity 9773.
- Oidium anacardi**, infection, *Anacardium occidentale*, powdery mildew, pathogenesis 421.
- Oidium begoniae**, powdery mildew, *Begonia*, factors affecting 401.
- Oidium begoniae**, powdery mildew, *Begonia*, fungicides foliar applications, antifungal activity 1393.
- Oidium cariae**, powdery mildew disease control, greenhouses plants, ectaconazole treatment 5004.
- Oil**, bacteria, fungi, biodegradation, fouling organisms, books, conferences 10004.
- Oil**, biodegradation, bacteria, marine environment 8719.
- Oil**, biodegradation, microorganisms 5147.
- Oil**, *Centrathrum anthelminticum*, antimicrobial activity 7909.
- Oil**, contamination, Desulfotribio, polyacrylamide effects on 5141.
- Oil**, deposits, bacteria microflora, flooding effects on activity 627.
- Oil**, deposits, flooding, relationship, phylum hydrogen bacteria activity, population dynamics 2387.
- Oil**, disease control, *Rhopalosiphum maidis*, *Schizaphis graminum*, vectors, maize dwarf mosaic virus, *Zea mays* 6843.
- Oil**, growth conditions, effects on, synchronous culture, *Lodderomyces elongisporus* 4266.
- Oil**, industrial effluents, wastewater treatment, digestion (anaerobic) 5305.
- Oil**, pipelines, Canada, bacteria biodegradation, hydrogen sulfide production association 7018.
- Oil**, shales, phosphorus mineralization, *Pseudomonas*, *Rhabditis* 556.
- Oil**, waste disposal, biodegradation, soil properties 7020.
- Oil and gas industry**, industrial wastes, land disposal, soil microorganisms biodegradation, petroleum 5983.
- Oil**, petroleum, wastewater treatment 6250.
- Oil cake**, carbon sources, *Bacillus licheniformis*, α -amylase production 1850.
- Oil**, olives, biodegradation, growth conditions, microorganisms 4746.
- Oil dispersants**, effects on, hydrocarbon-degrading bacteria, benzothiophenes, dibenzothiophenes, biodegradation 8717.
- Oil fields**, methanogenic bacteria isolation, USSR, characterization 3260.
- Oil installations**, sediments, hydrocarbons biodegradation, marine environment 2392.
- Oil pollution**, bactericidal activity, coliforms, indicator species 1550.
- Olia**, aflatoxin B1 food contamination, assays 275.
- Olia**, composition, *Banksia integrifolia* berries, effects on wine flavor, yeasts alcoholic fermentation 6639.
- Olia**, *Hyptis suaveolens* leaves, antifungal activity, *Helminthosporium oryzae* 494.
- Olia**, materials, sprays, use, control, disease spread, potato virus Y infection, *Solanum tuberosum* 1243.
- Oliaseed crops**, aflatoxins biosynthesis, *Aspergillus parasiticus* 1096.
- Oliaseed crops**, O-vanillin inhibition *Aspergillus parasiticus*, aflatoxins biosynthesis 3874.
- Okra mosaic virus**, host range, plants 3905.
- 11-O-isoapathalactone**, *Spongia officinalis*, antibacterial activity 8769.
- Olea europaea**, leaves, *Pseudomonas syringae* pv. *savastoni*, virulence 5742.
- Olea europaea**, heat treatments, factors affecting, *Lactobacillus plantarum*, fermentation 7592.
- Oleandomycin**, biosynthesis, actinomycetes, role nuclease, proteinase, α -amylase 7123.
- Oleandomycin**, biosynthesis, association, DNA fragments replication, *Streptomyces antibioticus* 8006.
- Oleandomycin**, quantitation, spectrophotometry methodology 6170.
- Oleandomycin**, *Salmonella* clinical isolates, antibiotic sensitivity testing 6112.
- Oleandomycin phosphate**, crystallinity, humidity effects on 8862.
- Oleuropein**, hydrolysis products, antibacterial activity, *Lactobacillus plantarum* 7925.
- Offactory stimuli**, soil microorganisms, role habitat selection, *Carabidae* 9532.
- Oligo(D-galactosiduronic acids)**, diazomethane esterification, pectinesterase effects on, *Aspergillus foetidus* 8251.
- Oligoribonucleotides**, synthesis, use *Bacillus intermedius* ribonuclease immobilized enzymes 8284.
- Oligosaccharides**, biosynthesis, streptoviridin antiviral activity, influenza A virus, influenza B virus, cell culture 6066.
- Oligosaccharides**, inhibition, adiposin, antibacterial activity, antifungal activity 2569.
- Oligosaccharides**, *Klebsiella* capsules polysaccharides, purification 8335.
- Oligosaccharides**, structure, cellulose biodegradation, *Cephalosporium sacchari* cellulase 4674.
- Oligosaccharides**, structure, swainsonine, effects on, Vesicular stomatitis virus, glycoproteins 4314.
- Olivanic acid**, derivatives, isolation, physicochemical properties, *Streptomyces olivaceus* 1663.
- Olive latent ringspot virus**, infection, *Gomphrena globosa*, ultrastructure 5780.
- Olive oil**, activated sludge degradation kinetics 8056.
- Olives**, fermentation, bacteria, food spoilage prevention 204.
- Olives**, food processing waste water, association, *Saccharomyces lipolytica* single-cell protein production 8212.
- Olives**, oil cake biodegradation, growth conditions, microorganisms 4746.
- Olivomycin**, Actinomadura antibiotic sensitivity testing 6109.
- Olivomycin**, binding DNA, fluorescent probes 8013.
- Omphalotus olearius**, mushroom poisoning, gastritis, man 7582.
- Oncobasidium theobromae**, dieback, *Theobroma cacao*, China, People's Rep. 7679.
- Oncometopia nigricans**, disease transmission, *Bacteria*, Pierce's disease, blight, Citrus 1204.
- Onions**, vacuum packaging, spoilage, Enterobacteriaceae, *Lactobacillus* 4882.
- Oospores**, *Oospores*, triacylglycerol lipase isoenzymes, purification, characterization 7354.
- Oospores**, characterization, *Peronospora sparsa* infection, *Rubus* 3997.
- Oospores**, *Peronospora sparsa* infection, formation, *Zea mays*, India 3018.
- Oospores**, *Peronospora sparsa* infection, *Zea mays*, seedlings, inoculum, methodology 8551.
- Opacity factor**, purification, characterization, *Streptococcus* group A 2740.
- Operating theaters**, control, pathogens, airborne microorganisms 7206.
- Operating theaters**, environmental hygiene, hospitals personnel 803.
- Operating theaters**, *Staphylococcus aureus* isolation, antibiotic resistance, antibiotic sensitivity testing 8980.
- Operons**, rpoB operon, *Escherichia coli* genes, rifampicin effects on transcription 1627.
- Operon**, *Operon*, biological control, nuclear polyhedrosis virus 9213.
- Oplostoma ulmi**, Ulmus sensitivity, relationship, Dutch elm disease distribution, Belgium 5080.
- Opsonins**, immunoglobulins, binding, cell walls, *Staphylococcus aureus*, immunofluorescence 8122.
- Optical properties**, Desulfotribio desulfurans cytochrome c553, *Pseudomonas aeruginosa* cytochrome c551 6546.
- Optical properties**, scanning electron microscopy, *Escherichia coli* characterization 858.
- Opuntia stricta**, yeasts rot, seasonal variation, food sources, *Drosophila* 3048.
- Orafuran**, antibiotic resistance, *Escherichia coli*, urinary tract clinical isolates 7034.
- Oral cavity**, bacteria isolates, xylitol bioassays 8782.
- Oral cavity**, candidiasis, clinical isolates, *Candida albicans*, antibiotic resistance, nystatin 8746.
- Oral cavity**, copper, zinc mouthwashes, retention, dental plaque inhibition, man 8998.
- Oral cavity**, isolates, antibacterial activity, metronidazole + spiramycin tablets 8864.
- Oral cavity**, *Streptococcus sanguis* isolates, amoxicillin antibiotic resistance, relationship dental caries prophylaxis 8734.
- Oral diseases**, relationship oral hygiene, military personnel, Greece 8080.
- Oral hygiene**, association, dental caries, gingivitis, children 8076.
- Oral hygiene**, association dental caries, mental retardation, children, Finland 8079.
- Oral hygiene**, association, periodontal diseases, dental caries, man, Tuvalu 8078.
- Oral hygiene**, bacteria periodontal diseases, prophylaxis, man 1733.
- Oral hygiene**, children, Israel 8999.
- Oral hygiene**, dental caries, prophylaxis, treatment, man, conferences 8189.
- Oral hygiene**, relationship oral diseases, military personnel, Greece 8080.
- Oral hygiene**, sugars consumption, relationship dental caries, children 8991.
- Oral microflora**, anaerobic bacteria, clinical isolates antibiotics activity concentrations 8814.
- Oral microflora**, dental plaque, man, toothbrushing comparison sodium chloride + hydrogen peroxide 8075.
- Oral microflora**, man, Candida, drug tolerance 4271.
- Oral microflora**, periodontitis, sodium bicarbonate + hydrogen peroxide effects on, man 5353.
- Oral microflora**, prophylaxis methodology, children 8993.
- Oranges**, blue mold, *Penicillium italicum*, thiabendazole resistance 6009.
- Oranges**, extraction, oils, protein, use, enzymes, *Neurospora crassa*, *Aspergillus terreus* 8483.
- Oranges**, green mold, antifungal activity comparison, thiabendazole, sodium orthophenylphosphate, CGA-64251 1319.
- Oranges**, *Penicillium digitatum* green mold, post-harvest decay, imazalil treatment 9452.
- Oranges**, post-harvest decay, *Penicillium italicum*, fenpropimorph disease control 4908.
- Oranges**, spoilage synergism, *Penicillium digitatum*, association benzimidazole sensitivity 1318.
- Orchards**, canker, *Botryosphaeria dothidea* 1223.
- Orchards**, *Malus pumila*, *Prunus*, incidence, *Phytophthora* 386.

Orchards, (continued)

Malus pumila, roots growth, rhizosphere microorganisms phytotoxins inhibition 4141.
nitrogen-fixing bacteria, nitrogen fixation, rhizosphere, *Artocarpus heterophyllus*, Area 955.
Phytophthora palmivora infection, prophylaxis, treatment, fungicides 5828.
Prunus persica, disease control, fungicides, brown rot, *Monilinia fructicola* 1405.
Prunus persica, disease spread, *Pseudomonas persicae* 4972.
tomato ringspot virus, disease transmission, *Xiphinema rivesi*, *Xiphinema americanum* 2142.

Orea,

mining, bacteria leaching 5135.

Organic acids,

composition, *Allium cepa*, white rot, *Sclerotium cepivorum* 5760.
pedicoccal halophilus, metabolism, use starter cultures, soy sauce 1054.
phosphate solubilization, phosphate-dissolving bacteria, *Aspergillus*, *Penicillium*, soil 3187.

Organic chemicals,

biochemical oxygen demand determination, standardization, inoculum, carbon sources, nitrogen sources effects on 9802.

Organic compounds,

biodegradation, bacteria, lakes sediments, fatty acid composition 7553.
chemical extraction, toxicity, anaerobic bacteria, fermentation 6778.
decomposition, bacteria, wastewater treatment, activated carbon filters 8956.
fermenters, salmonella contamination 1732.
fluorine, oxygen supply, microorganisms immobilized cells 6286.
haloaliphatic, dehalogenation, bacteria, methanogenesis 5290.
haloaliphatic, transformation, denitrification, growth conditions, bacteria 5291.
milk (culture), effects on, *Fusarium oxysporum* f.sp. *chrysanthemi*, *Fusarium oxysporum* f.sp. *lini*, wilt 4040.
+methyl loading, anaerobic conditions, bioreactors, degradation association 8940.
mineralization, bacteria, freshwater environments, sewage 2012.
production, use, fungi transformation, reviews 5441.
removal, water, microorganisms+activated carbon 6255.
soils (sandy), *Arachis hypogaea* shells composts effects on soil microorganisms 5133.

Organic matter,

biodegradation, bacteria, hydrogen intermediates 2011.
decomposition, leaf litter, *Pinus silvestris* 2299.
decomposition, nitrogen cycle, *Pinus resinosa*, forests 541.
decomposition, soil microorganisms, antibiotics effects on 5922.
decomposition, soil microorganisms, community composition, coal mines 5914.
decomposition, soil microorganisms, crop residues 2325.
decomposition, soil microorganisms, fertilizers effects on 5979.
decomposition, soil microorganisms, glucose radioactive labelling 1474.
decomposition, soil microorganisms, C/N ratios, soil amendment, crop residues 598.
decomposition, soil microorganisms, tropical environment 4186.
effects on antimicrobial agents activity, reviews 6081.
effects on, disinfectants, antimicrobial activity 7117.
formation, soil 1491.
leaf litter, biodegradation, microorganisms, alpine environments, Austria 9556.
mycelia, soil treatment, nitrogen mineralization 5949.
nutrient dynamics, nitrogen mineralization, forests 6895.
soil, accretion, nutrient cycles, biological activity, mudflows, USA, California, montane environments 9566.
soil, association, vesicular-arbuscular mycorrhizas growth 7810.
soil microorganisms activity, deserts 8665.
soil relationship, vesicular-arbuscular mycorrhizas saprophyagy 8672.
turnover, bacteria, soil 5096.

Organoleptic evaluation,

beef, mutton, tissues damage, bacteria contamination 181.
cheddar cheese, ripening, proteolytic enzymes 9271.
cheddar cheese, starter cultures, *Streptococcus lactis*, β -D-galactosidase mutants 9269.
cheese flavor, Cheddar cheese, proteolytic enzymes ripening 9270.
cheese, production, lactic acid bacteria, organoleptic evaluation 6662.
cheese, ripening, lactic acid bacteria, proteolysis 7584.
cheese, starter cultures levels, lactic acid bacteria 3822.
milk, bacteria contamination, standards 4839.
sweeteners, α -L-aspartyl-L-phenylalanine methyl ester, spoilage, beverages 3803.

Organoleptic properties,

champagne, yeasts fermentation, fermenters 7520.
cheese, lactic acid bacteria, ripening, soybean milk 3823.
milk, ultrahigh temperature pasteurization, centrifugation, bacteria 2933.
soil, nitrite inhibition *Clostridium botulinum*, growth, toxigenicity 303.

Organophosphorus,

association, *Pisum sativum* protection, cutinase inhibition, *Fusarium solani* infection 500.

Organa,

nucleolar single-cell protein, *Arthrobacter simplex* effects on, rats 8491.

Oryza pseudotsugata,

nuclear polyhedrosis virus biological control, *Pseudotsuga menziesii* 8352.

Oribatidae,

interspecific relationships, soil flora, fungi, forest floor, reviews 5069.

Ornamental plants,

disease control, fungicides use 5056.
Erwinia chrysanthemi pathogenicity, biotyping 4927.
fungi pathogens, fungicides resistance, greenhouses 4099.
greenhouses, inoculation methodology, *Erwinia chrysanthemi* 2229.
leafspot, *Drechslera setariae* 9426.
leafspot, irrigation effects on pathogenesis 1274.
leafspot, *Myrothecium roridum* 5747.
microplasma-like organisms, viruses, infection, diagnosis 2185.
pollen airborne particulates, association fungi distribution 7705.
trees, plant diseases, fungi, fungicides 9480.
viruses, disease control, antisera 2270.

Ornithine,

production, *Acinetobacter calcoaceticus*, arginine, mutants 6389.

Ornithine carbamoyltransferase,

Bacillus subtilis, purification, characterization 7382.

Ornithine decarboxylase,

Acetobacter, GTP sensitivity, spermine biosynthesis 8371.

Ornithine decarboxylase, (continued)

stereochemistry, *Escherichia coli*, *Bacillus cadaveris* 5606.

Ornithine decarboxylase inhibitor,

purification, activity, polyamines stimulation, *Physarum polycephalum* 81.

Orosolia lophogramum ryukyensis,

disease transmission, mycoplasma-like organisms, witches' broom, *Ipomoea batatas*, Solomon I. 9424.

Orthophenylphenol,

antibacterial activity, coliforms 8982.

Orthoptera,

role, *Colletotrichum graminicola* anthracnose, *Zea mays* 369.

Oryctolagus cuniculus,

biological control, myxomatosis, myxoma virus 6623.

Oryza,

host range, rice tungro virus, *Nephotettix virescens*, *Nephotettix nigropictus* vectors 4951.

Sclerotium oryzae stem rot, disease resistance 9469.

Oryza glaberrima,

disease resistance genes identification, rice yellow mottle virus infection 4968.
Sarocladium attenuatum infection, symptoms etiology 9366.

Oryza nivara,

inheritance, disease resistance, grassy stunt virus 5037.

Oryza sativa,

agronomic ecosystems, nitrogen cycle 3224.
blast, environmental conditions effects on pathogenesis 1169.
blast, *Pycularia oryzae*, antifungal agents effects on pathogenesis 5827.
blast, *Pycularia oryzae*, cultural characteristics relationship pathogenicity 5699.
blast, *Pycularia oryzae*, disease control, fungicides 8630.
blast, *Pycularia oryzae*, epidemiology, relationship, meteorology 1182.
blight, virulence, *Xanthomonas campestris* pv. *oryzae* 1195.
blight, *Xanthomonas campestris* pv. *oryzae*, virulence 352.
brown spot, *Helminthosporium oryzae*, biological control, *Streptomyces longisporus* antagonism 4105.
crop residues, acids hydrolysis, single-cell protein production, *Candida tropicalis* 9109.
crop residues, biodegradation, mesophilic microorganisms 168.
Cyanophyta association, nitrogen fixation, deep water, Philippines 2358.
Cyanophyta nitrogen fixation, USSR 7846.
disease resistance, genetic relationship, rice stripe virus, rice dwarf virus 6773.
disease resistance inheritance, *Xanthomonas campestris* pv. *oryzae* blight 9364.
disease resistance inheritance, *Pycularia oryzae* blast, USA 5711.
disease resistance, tungro virus 5812.
Drechslera oryzae infection, phytoalexins inducers use seed treatments, induction, hypersensitive response, disease resistance 2292.
Ephelis oryzae infection, chemical control 3149.
experimental infection, sheath rot, *Sarocladium oryzae*, inoculation, methodology 1188.
fungicides, *Pycularia oryzae* blast 2274.
genes, disease resistance, blight, *Xanthomonas campestris* pv. *oryzae* 9459.
genes, pest resistance, disease control, tungro virus, *Nephotettix virescens* 5548.
genetic analysis, rhizosphere, nitrogen fixation 8682.
grassy stunt virus, disease transmission, *Nilaparvata lugens* 4952.
host-parasite interactions, *Pycularia oryzae*, phytoalexins, isolation, identification 6849.
hypersensitive response, lesions, leafspot, *Bipolaris oryzae*, *Pycularia oryzae* 5039.
infection, *Fusarium equiseti*, *Fusarium semitectum* 1192.
inheriting, disease resistance, grassy stunt virus 5037.
irrigated areas, survival, *Colletotrichum gloeosporioides* f.sp. *aeschyromene*, water, soil 1189.
leaf blight, phenylalanine ammonia-lyase, tyrosine ammonia-lyase, levels 384.
leaf blight susceptibility, *Xanthomonas campestris* pv. *oryzae*, nutrients effects on 6750.
leaves, *Xanthomonas oryzae*, phytotoxins, purification, effects on 7640.
metalaxyl, seed treatments, disease control, downy mildew 1433.
Nephotettix transmission rice tungro virus, rice waika virus 6761.
nitrogen fixation, *Sesbania rostrata* manure effects on 4240.
nitrogen-fixing bacteria foliar applications, paddy fields 5121.
nodes, basal rot, *Fusarium oxysporum*, pathogenicity 3951.
paddy fields, soil microorganisms, enzymatic activity, redox potential, soil amendment, fertilizers, manure 9823.
paddy fields, sulfur nutrient cycles, sulfate-reducing bacteria 6958.
phosphate uptake, phosphate solubilization, phosphate-dissolving bacteria, *Aspergillus niger* 3188.
phytopathogenic fungi infection, lignin formation, phenols levels 6763.
rhizoctonia solani sheath blight, overwintering disease control, burning 4953.
rhizosphere microorganisms, parathion biodegradation 2897.
rhizosphere, nitrogen-fixing bacteria, growth, enumeration, isolation, spermosphere use 3616.
rhizosphere, *Pseudomonas*, nitrogen fixation 9536.
rice gall dwarf virus disease transmission, *Nephotettix* vectors 4987.
rice gall dwarf virus, disease transmission, *Recilia dorsalis*, *Nephotettix nigropictus* 1162.
rice tungro virus infection, susceptibility, incidence 1156.
rice tungro virus, disease transmission, *Nephotettix virescens*, vectors 360.
rice tungro virus infection, induction proline, leaves 1157.
rice tungro virus infection, insecticides, disease control, vectors 8613.
rice tungro virus, *Nephotettix virescens*, *Nephotettix nigropictus* vectors 4951.
rice yellow mottle virus, Nigeria 7572.
roots, association nitrogenase activity 8695.
Sarocladium attenuatum infection, symptoms etiology 9366.
scald, *Rhynchosporium oryzae*, phytotoxins, phytotoxicity, pathogenicity 9348.
Sclerotium oryzae disease resistance, plant breeding 7743.
seed-borne diseases, fungicides disease control 1434.
seedlings, *Rhizoctonia solani* infection, soil moisture effects on 4965.
sheath blight, *Corticium sasakii*, fungicides, disease control 3148.
sheath blight, height effects on yield 3017.
sheath blight, *Rhizoctonia solani*, histopathology 372.
sheath blight, *Rhizoctonia solani*, reviews 6766.
sheath blight, *Rhizoctonia solani*, virulence 1193.
straw, fermentation, *Penicillium anthracinum*, biomass production 7564.
straw, mold, hydrolysis, cellulase, *Trichoderma reesei* 7430.
Trichocoenelia padwickii infection, detection methodology 4963.

Oryza sativa, (continued)

- viruses infection, Japan, Asia, Southeast 4955.
wastewater treatment, films, formation, role, filtration 4444.
weed control, Aeschynomene virginica, biological control, Colletotrichum gloeosporioides f.sp. aeschynomene 6630.
white leaf disease, virus-like particles, etiology 8556.
wilt, Xanthomonas oryzae, soil pH 8545.
Xanthomonas campestris pv.oryzae blight, incidence, Niger 9355.
Xanthomonas oryzae infection, seed treatments, triphenyltin chloride 2293.
Xanthomonas oryzae leaf blight, disease resistance, germplasm analysis 5811.
yield, soils (acid), Bacillus firmus indole-3-acetic acid biosynthesis, India 4225.
- Ocellularia**, mixed culture, phosphorus removal, wastewater treatment 2615.
- Osmophilic fungi**, soil, surveys, Syria 7817.
- Osmotic pressure**, Kalanchoe, effects on tumors induction, Agrobacterium tumefaciens 4029.
sensitivity, association, dicarboximide, resistance, Botrytis cinerea, Penicillium expansum, Aspergillus nidulans 6022.
- Osmotic stability**, fungal flora, soil, surveys, Syria 7817.
- Osmotic stress**, Calamus sativus, tobacco necrosis virus infection, effects on enzymes 413.
Vigna sinensis, tobacco necrosis virus infection, effects on enzymes 413.
- Osteomyelitis**, gram-negative bacteria clinical isolates, drugs sensitivity, man 6057.
- Ostrinia nubilalis**, Bacillus thuringiensis spores+crystals complex, exotoxins, effects on 7489.
biological control, Bacillus thuringiensis 8375.
infection, effects on Diplota maydis, stalk rot, disease resistance, Zea mays 361.
pests, infestation, relationship stalk rot, Gibberella zeae, Fusarium graminearum, Zea mays 9349.
- Otiorynchus sulcatus**, eggs, larvae, biological control, Metarhizium anisopliae 986.
- Otitis externa**, man, epidemiology, association water quality, bacteria contamination 2630.
Pseudomonas aeruginosa, man, baths, water-borne diseases 8070.
- Otitis media**, Haemophilus influenzae, ampicillin resistance, man 647.
microflora, exudates, man, antimicrobial agents treatment, antibiotic sensitivity testing 1586.
- Oudemansella mucida**, mucidin, biosynthesis, radioactive labelling 7187.
mucidin biosynthesis, tryptophan, nutrient requirements 8015.
- Oudemansin B**, biosynthesis, Xerula, structure, antifungal activity 8042.
- Outer membranes**, Alteromonas haloplankis, removal methodology, factors affecting 9026.
bacteria, phospholipase role, drugs antibacterial activity 8783.
Escherichia coli, β -lysin antibacterial activity 3316.
Escherichia coli, antibacterial activity, hexametaphosphate+glycerol monooctate 4291.
Escherichia coli, succinate dehydrogenase, antibacterial activity, glycerol monooctate 4290.
membrane permeability, association, Pseudomonas aeruginosa, polymyxin antibiotic resistance 632.
protein composition, association, polymyxin resistance, Pseudomonas aeruginosa 663.
protein composition, Pseudomonas syringae pv.syringae, relationship plant diseases virulence 7307.
protease, Brucella abortus, isolation, purification, characterization 1827.
proteins, Vibrio parahaemolyticus, purification, characterization 9124.
proteolytic enzymes, activity, colicins, Escherichia coli 1914.
Pseudomonas cepacia, isolation, characterization 4480.
Salmonella typhimurium, polymyxin B effects on 7159.
- Overproduction**, brotin, Bacillus sphaericus 8381.
- Overwintering**, beet yellows virus, infection, Beta vulgaris 3045.
dieback, Phytophthora parasitica, temperature, effects on, Rhododendron 9389.
Hordeum vulgare, barley yellow dwarf virus infection effects on 354.
Monilia fructicola, Prunus persica, fungicides effects on sporulation 7783.
mycoplasma-like organisms, rhizomes, Rubus idaeus, Cirsium arvense 6816.
powdery mildew, Vitis vinifera buds 1270.
Puccinia graminis f.sp.tritici races, stem rust, Triticum aestivum, USA, Texas, Mexico 4961.
Rhizoctonia solani blight, Oryza sativa, disease control, burning 4953.
rust, Saccharum, USA, Mississippi 3016.
Venturia inaequalis, Malus scab 1201.
- Oviposition**, atlatlactes, Megastela halterata, chemical composition, Agaricus bisporus 6661.
- Ovomucoidin**, Coturnix japonica, interaction trypsin-like enzyme, Streptomyces erythraeus 6481.
- Ovotransferrin**, antibacterial activity, Proteus 6014.
- Oxacillin**, antibiotic tolerance, Staphylococcus aureus, pH effects on 3408.
bacterial activity, Staphylococcus aureus, factors affecting 2547.
+benzalkonium chloride, binding heart prosthetics, prophylaxis, postoperative infection, dogs 5343.
+rifampicin, bacterial activity, Staphylococcus aureus 5263.
+rifampin, antibiotic antagonism, antibacterial activity, Staphylococcus aureus 750.
- 1,3,4-Oxadiazoles**, synthesis, antibacterial activity 8749.
- 4-Oxalitranslate aldolase**, purification, characterization, Pseudomonas ochracea 6480.
- Oxalic acid**, aquatic environment, sediments, biodegradation, bacteria 7543.
- Oxaline**, association, nquelortine, biosynthesis, Penicillium oxalicum 6698.
- Oxalle corniculata**, disease reservoirs, tomato ringspot virus, prunus 1209.

- Oxalis tuberosa**, mycoplasma-like organisms infection, incidence, Bolivia 433.
- 4-Oxalmeaconate hydrolase**, purification, characterization, Pseudomonas ochracea 6480.
- Oxaloacetate decarboxylase**, purification, characterization, cell membranes, Klebsiella aerogenes 1870.
- Oxi Ferm tube test**, identification, clinical isolates, non-fermentative gram-negative bacteria, oxidase-positive bacteria 9019.
methodology 5390.
- Oxidase test**, Pasteurella, detection 5410.
Vibrionaceae, agar media, comparison 9043.
- Oxidative phosphorylation**, AMP, Candida boidini, ATP biosynthesis 1031.
- Oxidoreductase**, enzymes, use, biotechnology, reviews 9145.
- 2-Oxlimino acids**, Endomycopsis lipolytica, gas chromatography detection 1843.
- Oxo-1,4- α -D-glucosidase**, hydrolysis, starch, Endomycopsis fibuligera 6498.
isoenzymes, purification, characterization, Aspergillus niger 4622.
- α -Oxo- γ -methylthiobutyric acid**, oxidation, ethylene production, Phanerochaete chrysosporium 1517.
- 2-Oxo-3,4,5-trimethylcyclopentenylacetic acid**, oxidation, Pseudomonas putida, monooxygenase activity 1881.
- Oxolinic acid**, antibacterial activity, Aeromonas salmonicida 8763.
antibacterial activity, Yersinia ruckeri, animal isolates, in vitro 8766.
comparison, norfloxacin antibacterial activity, Pseudomonas aeruginosa, Staphylococcus aureus 5197.
- Oxovinyl triphenyl phosphonic acids**, derivatives, antimicrobial activity, Pseudomonas aeruginosa, Candida albicans 9700.
- Oxycarbaxin**, powdery mildew control, Rosa 5044.
- Oxycarboxin**, antifungal activity, Choanephora cucurbitarum 4004.
effects on Conidiobolus obscurus resting spores spore germination 7762.
- Oxygen**, absorption, aeration tanks, wastewater treatment 4437.
adsorption coefficients, fermenters, energy consumption 8406.
application, yeasts batch culture fermenters 5442.
association, hydroxylation, 11-desoxy-17-hydroxycorticosterone, Pellicularia filamentosa 4636.
association, limitations, aflatoxins biosynthesis, Aspergillus flavus 7621.
association, myeloperoxidase, xanthine oxidase, susceptibility, Legionella pneumophila 2429.
barriers films, beef vacuum packaging, bacteria food contamination 261.
contraction, nitrogen fixation roots nodules, Myrica gale 7859.
consumption, relationship, fermenters, mass transfer 6288.
content, media, association, Bacillus brevis gramicidin S biosynthesis 6225.
content, media, effects on Bacillus brevis gramicidin S biosynthesis 6226.
continuous culture, Candida utilis, mathematical models, effects on ethanol production 4731.
deficiency effects on, Acetobacter aceti, acetic acid fermentation 6371.
deficiency effects on Acetobacter aceti subsp.aceti, morphology, acetic acid fermentation 8197.
distribution, sodium acetate incorporation, Penicillium multicolor tetrone acids 7287.
effects on Candida utilis continuous culture, ethanol metabolism, biomass yield 7509.
effects on, Erwinia carotovora, pectinolytic enzymes, soft rot, potatoes 5033.
effects on flavocytochrome b2 biosynthesis, Hansenula anomala 5473.
effects on heart rot, sap rot, wood decay 5084.
effects on methanogenesis, digestion (anaerobic), comparison, rumen, spectrometry 9629.
effects on, pyridine nucleotide transhydrogenase multiple forms, Azotobacter vinelandii 5405.
electrodes, microorganisms respiration, models 9007.
electrodes, Nitrobaracter immobilized cells, use, sodium nitrite sensors 5430.
incorporation, Eupenicillium brefeldianum brefeldin A biosynthesis 4421.
inhibition, methanogenesis, digestion (anaerobic), rumen, in vitro 8058.
levels, storage conditions, Pseudomonas marginalis soft rot, post-harvest decay, tomatoes 9453.
levels, vertical distribution, iron-oxidizing bacteria, reclaimed land, coal mines 9561.
packaged food, cold storage, poultry, lactic acid bacteria spoilage 6686.
penetration, Bacillus cereus, cell culture, measuring techniques 6341.
permeability, polyethylene packaging, spoilage, milk products 4884.
pressure, ethanol biosynthesis, Candida utilis growth, fermenters 138.
role, lignin biodegradation, Phanerochaete chrysosporium 3763.
role, lignocellulose biodegradation, Phanerochaete chrysosporium 7550.
role, squamale monooxygenase (2,3-epoxidizing), biosynthesis, activity, Saccharomyces cerevisiae 8216.
Saccharomyces cerevisiae continuous culture, effects on 9994.
spore germination, Verticillium dahliae 6968.
supply, microorganisms immobilized cells, hemoglobin, fluorine organic compounds 6286.
transfer, rates, effects on, Trichoderma viride, cellulase, production 3671.
uptake, Candida intermedia, fermentation 128.
uptake, Candida mutants, relationship, ethanol production 8398.
uptake, Escherichia coli, association, growth, measuring techniques equipment 9885.
uptake measuring methodology, microorganisms, activated sludge 5359.
uptake measuring techniques, Saccharomyces cerevisiae continuous culture 900.
uptake, Parasponia rigida, nitrogen fixation, nodulation, Rhizobium 3243.
uptake, wastewater treatment 4436.
- Oxygen consumption**, electron transport, soil microorganisms, measuring techniques 1494.
- Oxygen tension**, association, Pseudomonas fluorescens batch culture 108.
effects on, carotenoids, poly- β -hydroxybutyric acid, superoxide dismutase, fumarate reductase (NADH) biosynthesis, Azospirillum brasilense continuous culture 2749.
Penicillium chrysogenum, effects on penicillin biosynthesis 753.

- Oxygen tension, (continued)**
Paenibacillus chrysogenum, effects on penicillin biosynthesis 1616.
 yeasts, effects on ethanol fermentation 143.
- Oxygenase,**
 biodegradation, transformation, aromatic compounds, *Saccharomyces cerevisiae*, reviews 3667.
- Oxygenation,**
 cadinane derivatives, *Cyathus striatus* 7463.
 wastewater treatment, aeration tanks, effects on activated sludge 789.
- Oxymiminocephalosporins,**
 β -lactamase stability 2538.
- Oxyphenylbutazone,**
 inhibition, interferon antiviral activity 3346.
- Oxytetracycline,**
 antibacterial activity, *Chlamydia* 9714.
 antibiotic resistance, R factors, *Staphylococcus aureus* 2403.
 antibiotic resistance, *Staphylococcus aureus* clinical isolates 3288.
 biosynthesis, aeration, agitation, effects on 4394.
 biosynthesis, *Streptomyces rimosus*, agitation effects on 2563.
 biosynthesis, *Streptomyces rimosus* mutants, isolation methodology 9054.
 biosynthesis, *Streptomyces rimosus*, nutrient dynamics association 6183.
 biosynthesis, *Streptomyces rimosus*, temperature effects on 2564.
 crystals, solubility 1636.
 detection, milk, blood 4393.
 disease control, *Mycoplasma*-like organisms, yellows, *Cocos nucifera* 1206.
 + EDTA + tromethamine, antibacterial activity, *Escherichia coli* 8765.
 injection, disease control, apple mosaic virus, *Maulis pumila* 9500.
 production, *Streptomyces rimosus*, aeration 4392.
 sensitivity, *Streptococcus* animal isolates 5193.
Streptomyces rimosus, biosynthesis, foams suppressors effects on 1639.
- Oxytetracycline hydrochloride,**
 treatment, X disease, *Prunus persica* 2152.
- Oysters,**
 coxsackievirus recovery, methodology 2908.
 food contamination, *Vibrio cholerae*, pasteurization, cooking 2912.
 food contamination, *Vibrio parahaemolyticus* 2910.
 Norway agent food poisoning, man, gastroenteritis, food consumption 1072.
 pasteurization, economics, food technology 2936.
- Ozonation,**
 aromatic compounds, effects on wastewater treatment, biodegradation 5294.
 wastewater treatment, microorganisms disinfection 5324.
- Ozone,**
 association, straw biodegradation, oxidation, rumen microorganisms 4751.
 degradation, RNA, tobacco mosaic virus, yeasts 1592.
 disinfection, laboratories effluents 8984.
 disinfection, waste water 5293.
 disinfection, waste water 5297.
 effects on, *Glomus geosporum*, interaction, Glycine max 8674.
Glomus anisous growth, effects on 541.
 pollution effects, *Glomus fasciculatus* growth, *Lycopersicon esculentum* roots exudates 7811.
 pretreatment, cotton, biodegradation, carbohydrate-degrading bacteria, rumen microorganisms 1062.
 pretreatment, sheep, rumen microorganisms, digestibility, *Gossypium hirsutum* crop residues 5633.
 pretreatment, sheep, rumen microorganisms, digestibility, *Gossypium hirsutum* crop residues 5634.
 use, *Legionella pneumophila* eradication, hospitals 4460.
- Pachysandra terminalis,**
 alfalfa mosaic virus infection, symptoms, new records 1241.
- Pachysolen tannophilus,**
 ethanol fermentation, galactose association 146.
 ethanol production 2871.
 ethanol production, use, hydrolytases, *Pinus radiata*, *Populus tremuloides* 8411.
 mutants, acetic acid production 2733.
 nitrate, effects on, fermentation, xyllose, glucose 7534.
 xyllose fermentation 7532.
 xyllose fermentation, ethanol biosynthesis 135.
- Pachysalix coccinea,**
 cucumber mosaic virus infected, methodology, isolation, double-stranded RNA 3897.
- Packaged food,**
 poultry, lactic acid bacteria spoilage, cold storage, carbon dioxide, oxygen 6686.
- Packaging,**
 bacteria growth, beef, liver, tongue, cold storage 267.
 beef, bacteria, growth, contamination 265.
 beef, contamination, growth, *Staphylococcus aureus* 272.
 beef, food contamination, bacteria 224.
 carbon dioxide, Enterobacteriaceae, Lactobacillus, spoilage, meat 4879.
 cold storage, poultry, spoilage 4881.
 food, plastics, association, microorganisms contamination 1094.
 grapes, effects on *Boltyia cinerea* post-harvest decay 2905.
 meat, carbon dioxide inhibition *Pseudomonas fluorescens*, spoilage 7610.
 milk, pasteurization, contamination, bacteria 8500.
 nitrogen, potatoes, spoilage, psychrophilic bacteria 4683.
Pleurotus sajor-caju spores 4516.
 potatoes processing, sterilization 4801.
 seafood, food contamination, spoilage, bacteria 2935.
 sterilization, bacteria 4321.
- Paddy fields,**
 biodegradation, herbicides, molinate, soil types, pathway 5886.
 distribution, heterotrophic bacteria 4219.
Leguminosae giganteum survival, overwintering, biological control, *Culicidae* 6615.
Oryza sativa, nitrogen-fixing bacteria, foliar applications 5121.
Oryza sativa, soil microorganisms, enzymatic activity, redox potential, soil amendment, fertilizers, manure 9623.
Oryza sativa, sulfur nutrient cycles, sulfate-reducing bacteria 6958.
 soil nitrogen fixation, pesticides effects on, heterotrophic bacteria 619.
- Paecilomyces,**
 α -amylase, purification, characterization 6455.
 incidence, drinking water systems 1722.
- Paecilomyces abruptus,**
 antibiotic CC-1014, antibiotic CC-1014B, characterization 2566.
- Paecilomyces carneus,**
 protoplasts fusion, recombination, β -lactam antibiotics biosynthesis 8806.
- Paecilomyces farinosus,**
 culture mass production, infectivity *Spodoptera exigua* larvae, field trials 7504.
- Paecilomyces fusiformis,**
 mixed culture, lignocellulose biodegradation 3772.
- Paecilomyces varioti,**
 biodegradation, feeds preservation, 8-quinolinol treatment 5630.
 mixed culture, lignocellulose biodegradation 3772.
 proteins feeds, allergenicity, occupational exposure, man 7607.
- Palmit,**
 + lungedices, disease control, *Chondrostereum purpureum*, wound infection, *Prunus armeniaca*, *Prunus avium* 8629.
 processes, industrial wastes, waste water oxidation 5318.
- Palmitic acid,**
 use, labelling, bacteria, association, cell aggregation assays 7245.
- Paragrellus redivivus,**
 host-parasite interactions, predator-prey interactions, nematophagous fungi 9550.
- Paracaea,**
 ribonuclease, antiviral activity, pseudorabies virus, foot-and-mouth disease virus 6077.
- Pandanus tectorius,**
 incidence, *Azospirillum*, rhizosphere microorganisms, tropical environment 7853.
- Panicum antidotale,**
 Claviceps infection, India 6770.
- Panicum coloratum,**
 nitrogen cycle, grazing, fertilization, mycorrhizas 1484.
- Panicum millaceum,**
 wheat mosaic virus infection, cytology 2117.
- Panicum mosaic virus,**
 immunoelectrophoresis, methodology 3536.
 infection, *Stenotaphrum secundatum* 4948.
 infection, *Stenotaphrum secundatum*, disease resistance 3117.
- Panicum repens,**
 Claviceps infection, India 6770.
- Panithethenic acid,**
 media (selective), *Saccharomyces* wild types 3628.
- Papain,**
Pseudomonas cocovenenans bongkreikic acid inhibition 2079.
- Papaver somniferum,**
 stems, *Sclerotinia sclerotiorum* infection, effects on morphine production, distribution 5812.
- Papaya ringspot virus,**
 disease resistance, relationship watermelon mosaic virus disease resistance, genetic analysis, *Cucumis melifera* 5578.
- Paper,**
 pulp, fungi treatment effects on 896.
- Paper mills,**
 cooling water, bacteria growth, pH, temperature 7201.
 industrial effluents, color removal, use, *Coriolus versicolor* 8961.
- Papilloma virus (bovine),**
 purification, gel filtration 1747.
- Parabens,**
 effects on, clostridium botulinum toxins, production 2089.
 effects on, *Escherichia coli*, *Bacillus subtilis*, DNA biosynthesis, RNA biosynthesis, protein biosynthesis 7120.
- Paracelsin,**
 isolation, characterization, *Trichoderma reesei* 8010.
- Paracoccus,**
 bacteria growth, association carbon 8069.
- Paracoccus denitrificans,**
 comparison, *Pseudomonas stutzeri*, *Pseudomonas aeruginosa*, denitrification 5107.
 denitrification energetics, reviews 5117.
 membrane potential analysis, electrodes construction methodology 8124.
 production ubiquinone-10, anaerobic conditions 5551.
 superoxide dismutase, kinetics, pulse radiolysis 6540.
- Parafin,**
 metabolism, *Candida guilliermondii*, continuous culture 2390.
- Paraformaldehyde,**
 antibacterial activity, coliforms 8982.
 decontamination, laboratories, *Legionella pneumophila*, survival 2459.
 tablets use, medical instruments sterilization 5226.
- Paraherquinin,**
 Penicillium paraherquelii, isolation, structure 8376.
- Parainfluenza virus,**
 combined vaccines, antibody response, dogs 3449.
 parvovirus (canine), adenovirus (canine), canine distemper virus, Leptospira, bacterins, vaccines, immunogenicity, dogs 8924.
- Parainfluenza virus 3,**
 proteins, hemagglutinins, vaccines, immunogenicity, mice, sheep 7189.
- Parasquat,**
 effects on spores quantity, *Rhynchosporium secalis* infection, Hordeum 486.
 stimulation stimulation, *Colletotrichum truncatum*, Phomopsis, anthracnose, stem blight, Glycine max 5821.
- Parasutic cycle,**
Fusarium moniliforme, virulence, soil-borne diseases 6854.
- Parasites,**
 drinking water contamination, Egypt, rivers 2619.
 Nematophthora gynophila, incidence, Heterodera glycines infection, Glycine max 2848.
- Parasitism,**
 Arcutobium abietinum, branches, Cytospora abietis dieback, Abies magnifica 5863.
 Cuscuta campestris, disease transmission, grapevine fleck virus, grapevine yellow vein virus, grapevine leaf roll virus, Vitis vinifera 6591.
 Phlyctocythium, Rhizidiomyopsis, Gigaspora margarita, Glomus fasciculatus, fungicides, effects on 5200.
 Trichoderma harzianum, Rhizoctonia solani, detection, photography, methodology 8159.
- Parasponia rigidia,**
 oxygen, uptake, nitrogen fixation, nodulation, Rhizobium 3243.
- Parastacodites tasmanica,**
 burrows effects on soil microorganisms, respiration, peatlands 7803.
- Parathion,**
 biodegradation, rhizosphere microorganisms, *Oryza sativa* 2897.
 hydrolysis, soil, role, *Bacillus*, *Arthrobacter* 160.

Parathion, (continued)

hydrolysis, soil, role, soil microorganisms 155.
paddy fields soil, effects on nitrogen fixation, heterotrophic bacteria 619.

Particle size,

bogs, mineralization, nutrient levels, peat, nitrogen, soil microorganisms 8697

Parvificin,

structure 1664.

Parvovirus (canine),

antibodies, serum neutralization assays 1765.
canine distemper virus, adenovirus (canine), parainfluenza virus, Leptospira, bacteria, vaccines immunogenicity, dogs 8924.
vaccines, antibody response, immunity, dogs 2599.
vaccines, antigenic characteristics 2598.

Paspalum notatum,

rhizosphere, nitrogen fixation, Azotobacter paspali, nitrogen-15, measuring techniques 9609

Paspalum notatum var. batatais,

nitrogen fixation 4246.

Paspalum urvillei,

incidence, Azospirillum, rhizosphere microorganisms, tropical environment 7853.

Passalora,

infection, leaves, Zizyphus rotundifolia 7790.

Passiflora edulis,

brown spot, Alternaria alternata infection, characterization 399.

Passive hemagglutination,

immunoglobulin G, detection, cytomegalovirus 5375.

Shigella dysenteriae antibodies, assays 882.

Streptococcus group A antigen M antibodies detection 6325

Passive reverse hemagglutination,

hepatitis B virus detection, man 2650.

Pasta,

food poisoning, Clostridium perfringens, kitchens hygiene, man 7576.

Pasteurella,

drug resistance, antibiotic resistance, animal isolates, cattle, respiratory tract diseases 7884.

lysozymes, kodidae, eggs, antibacterial activity 1552.

oxidase test, detection 5410.

Piscis pathogens, biological properties, identification methodology 1785.

Pasteurella hemolytica,

animal isolates, antibiotic resistance, antibiotic sensitivity testing, surveys 634.

animal isolates, antibiotic resistance, surveys 3287.

cryopreservation, antigens localization, methodology comparison 849.

infection, cattle, antibiotic resistance 8722.

serotypes, cytotoxins, production, antisera, neutralization 8518.

Pasteurella multocida,

animal isolates, antibiotic resistance, antibiotic sensitivity testing, surveys 634.

animal isolates, antibiotic resistance, surveys 3287.

antibacterial activity, ciprofloxacin 9661.

isolation, milk, meat 3828.

lipopolysaccharides, structure 2819.

Pasteurization,

breast milk, bacteria contamination 214.

corn, contamination, psychrotrophic bacteria, gram-negative bacteria 8499.

milk, Campylobacter fetus subsp. jejuni, heat sensitivity 2060.

milk, chemical analysis, bacteria 191.

milk, packaging, contamination, bacteria 8500.

milk, psychrotrophic bacteria, lipase inactivation 263.

milk, refrigeration, bacteria, spoilage 2913.

oysters, economics, food technology 2936.

oysters, food contamination, Vibrio cholerae 2912.

ultrahigh temperature, bacteria centrifugation, milk, organoleptic properties 2933.

ultrahigh temperature, milk, limulus lysate test, detection, bacteria 201.

Pasteurized milk,

cheese production, lactic acid bacteria, organoleptic evaluation 6662

Staphylococcus aureus, Feeding trials, cattle, juveniles 4869.

Pasture,

nitrogen fixation, Trifolium repens, Trifolium pratense 6981.

soil properties, diurnal variations 1493.

restoration, effects on microorganisms biomass, soil removal 3182.

soil microorganisms, respiration, soil moisture, soil temperature 3183.

soil, Pythium splendens suppression, germination, growth 9551.

Trifolium repens, nitrogen fixation, soil amendment, urine, urea 3240.

wetlands, soil microorganisms, biochemical characteristics, soils (loam) 2337.

Patent,

microbiology technology, reviews 8358.

Pathogenesis,

Acididium oesopsermi infection, Chrysanthemoides monilifera subsp. monilifera 427.

Anacardium occidentale powdery mildew, Oidium anacardi infection 421.

blast, Oryza sativa, environmental conditions effects on 1169.

broad bean, Oryza sativa, symptoms, experimental infection 1293.

broad bean stem virus infection, Vicia faba 338.

canker, Glendistia triacanthos 1480.

Coccomyces hiemalis infection, Prunus cerasus, water effects on 1203.

corky root, Lycopersicon esculentum 1264.

Inonotus obliquus infection, Betula papyrifera 1450.

leafspot, ornamental plants, irrigation effects on 1274.

leafspot, Sclerophyllum botryosum, light, relative humidity effects on, Medicago sativa 1141.

Macrophomina phaseolina infection, Crotalaria juncea, seeds 1272.

Marssonina brunnea infection, Populus 549.

Marssonina canker, Prunus cerasifera, Nematoda effects on 1212.

Nectria haematococca infection, Excaum affine, stem rot, wilt 1262.

Phytophthora zeae, association, Zea mays 353.

post-harvest decay, Gliocladium roseum, Sclerotium rolfsii, Aspergillus niger, apples, pears, peaches, amino acids, levels 1324.

tobacco streak virus infection, plants 1126.

Uromyces ruminis infection, Emex australis, effects on dispersal 425.

Washingtonia buds rot 1256.

Zea mays rust 1168.

Pathogenicity,

Armillaria mellea, role tannic acid stimulation rhizomorphs formation 1455.

Ascochyta pisi, role toxins, necrosis, Pisum sativum 1140.

Bacillus thuringiensis, biological control, Glossina pallidipes 984

Pathogenicity, (continued)

bacteria, antibiotic resistance 2415.

bacteria, effects on, Beta vulgaris crop production 403.

bacteria, wilt, Gramineae 359

2-chlorethylphosphonic acid effects on, microorganisms infection, plants 319.

Colletotrichum, Glomerella, fruit rot, Lycopersicon esculentum 1301

comovirus, host range, crops 2172

Cronartium ribicola, genetic variance, blister rust, Pinus monticola 1452.

Deuteromycetes, biological control, Culicidae 1012

Drechslera teres, Hordeum vulgare 1181.

environmental effects, Bacillus thuringiensis, Culex pipiens, Aedes aegypti 295.

lysis, gram-negative infection, Hordeum, association, indomorph treatment 485

Escherichia coli, food contamination, isolation methodology effects on 177

Fomes annosus, Pinus roots, ozone effects on 541

fungi crown rot, Musa sapientum 395

Gibberella zeae, Zea mays, biological properties 1167.

gram-negative bacteria scald, Prunus salicina 1153.

mulches effects on, Verticillium wilt, Solanum melongena 476.

pest control, Bacillus thuringiensis, Culicidae 296.

Phaeosulcus vulgaris, Fusarium, association keystone hydrolase, biosynthesis 345.

phytopathogenic fungi, cryopreservation, viability, methodology 4544.

Phytophthora megasperma f. sp. glycinea, temperature effects on, Glycine max, Medicago sativa, Cicer arietinum 336.

plant diseases, measuring techniques, mathematical models 1116

pyovirus infection, plants, Populus isolates 316.

Puccinia menthae infection, rust, Mentha, host specificity 431.

Pyrenomyces, new records, Metrosideros collina subsp. polymorpha infection 4147.

Pycularia grisea, blast, Lolium multisetum 1178.

Rhizoctonia, Cyndrodium pteridis, Cyndrodium heptaseptatum,

post-harvest decay, symptoms, Rumohra adiantiformis 1326.

Rhizoctonia solani, Canca papaya 1218.

Rhizoctonia solani isolates, blight, Phaeosulcus vulgaris 1134.

Sclerotinia sclerotiorum, role polygalacturonase 946.

Sphaerotheca fuliginea, Cucumis melo 1275.

Verticillium albo-atrum strains, Medicago sativa 1131.

water potential effects on, Fusarium culmorum infection, Triticum 1149.

Xanthomonas campestris, pv. vesicatoria 410

Xanthomonas phaseolicola, Phaeosulcus vulgaris, sulfur dioxide effects on 334.

Xanthomonas vesicatoria races, spot, Capsicum annum 1309.

Yersinia enterocolitica, food contamination 174.

Yersinia enterocolitica, food isolates 2048.

Pathogens,

airborne microorganisms, control, operating theaters 7206.

isolation, Pisces, isolation methodology 9078.

Bacillus sp. Bacillus thuringiensis, Culicidae, 2850.

Bacillus thuringiensis, biological control, Insecta 999.

bacteria, antibacterial activity, EDTA-Tis- antibiotics 7080.

bacteria, contamination, milk 4818.

bacteria, isolation, sewage sludge 6248.

bacteria, man, incidence, detection 2640.

Basidiomycetes, Verticillium fungicola, Mycogone perniciosa, resistance,

antifungal agents 5826.

biological control, bioassays, Culiciniomyces clavosporus, Simulium pectipes,

Simulium vittatum 7483

biological control, safety regulations 1025.

biological control, weed control, books 8183.

competition, evolution, Uredinales 6754.

contamination, houses, bacteria 4500.

control, excretory products disposal, man, vectors 6273.

Cucumis sativus, induction disease resistance, Fusarium oxysporum

f.sp. cucumerinum 2262.

culture, bottles, methodology 5358.

disinfection, sewage sludge 8936.

disinfection, sludge, wastewater treatment 9805.

feces, sampling methodology, man 2708.

foliage, fungi, humidity chambers 4523.

foot rot antifungal activity, peracetic acid, Gramineae 1394.

fungi, antifungal activity, bifonazole, clotrimazole 7938.

fungi, biological control, Culicidae 1017.

fungi, biological control, Culiciniomyces 1013.

fungi, disease resistance, association, Hordeum spontaneum fertility 6759.

fungi, identification, immunoassays, reviews 8165.

fungi, interaction vesicular-arbuscular mycorrhizas, plant diseases 317.

fungi, mortality factors, forests, Fagus, Magnolia 4171.

fungi, ornamental plants, fungicides resistance, greenhouses 4099.

fungi, pest control, biological control, Insecta 994.

fungi, plants, solar radiation effects on viability 4919.

Gramineae footrot, antagonism, Pseudocercospora herpotrichoides, Fusarium,

Rhizoctonia cerealis 1148.

inactivation, occupational exposure risks, land disposal, industrial wastes,

reviews 5978.

incidence, Triticum aestivum, growth, nutrient uptake, factors affecting 5725.

isolates virulence, Bacillus thuringiensis, Chironomus fumiferana 8379.

isolation, culture, methodology, Entomophthorales, Insecta 1783.

isolation, dentures, containers, cancer patients 3506.

Mangifera indica, drug resistance, fungicides 1532.

Metarhizium anisopliae, biological control, eggs, larvae, Otiorhynchus sulcatus

986.

microorganisms, biological control, Mollusca 1011.

microorganisms, immunoassays detection, Insecta 1736.

New Zealand plants, fungi, new records 326.

Nomuraea rileyi, biological control, Lepidoptera 1010.

pest control, biological control, coniferations 1819.

pest control, biological control, foliar applications, methodology, crop fields,

Arthropoda 991.

pest control, biological control, foliar applications, crop fields, Insecta 992.

pest control, biological control, foliar applications, Insecta 993.

pest control, biological control, Insecta 988.

pest control, fungi, Insecta 995.

pest control, Hyphomyces, Insecta 1003.

pest control, Metarhizium anisopliae, biological control, Nasutitermes exitiosus

7502.

phytochemicals receptors, plasma membranes, plant diseases, reviews 2096.

Pisces, biological properties, Vibrio, Pasteurella, identification methodology

1785.

plant diseases, biological control, weed control, developing countries 7472.

Pathogens, (continued)

- plant diseases, natural selection, reproductive strategy, mathematical models 2976
- plant diseases, population ecology, limiting factors, environmental factors 5698
- plants, preservation, gels + cold storage 2688
- plants, seed-borne diseases, quality control assays 2965
- reduction, γ radiation, disinfection, sewage sludge 8935
- reduction, composting, sewage sludge 8938
- root rot, inhibition, rhizosphere microorganisms, plants 1118
- steel cabinets, laminar air flow, safety regulations 5337
- sewage sludge, biodegradation, conferences 9096
- tetracycline sensitivity 7077
- Triticum stem rust, disease control, *Barbrens vulgaris* eradication, USA 1389
- viruses, biodegradation, pest control, Insecta 990
- Pathology,**
- barley yellow dwarf virus, interaction, rust, *Puccinia recondita* f.sp.tritici, *Triticum aestivum*, *Puccinia hordei*, *Hordeum vulgare*, *Puccinia coronata* f.sp.avenae, *Avena sativa* 344
- blight, *Beniowskia spphaeovidea*, *Setaria geniculata* 1184
- blight, *Phomopsis vaccinii*, *Vaccinium corymbosum* 1271
- Fusarium infection, *Crotalaria juncea*, symptoms 1280
- gummosis, *Botryosphaeria*, *Prunus persica* 1217
- infection, varcella-zoster virus comparison herpesvirus (simian), neutralization tests 1756
- metaxyl effects on, *Phytophthora cactorum* collar rot, *Malus pumila* 505
- prunus necrotic ringspot virus, experimental infection, *Prunus* 405
- purple spot, *Phytophthora vesicatum*, *Asparagus officinalis* 1296
- rust, *Cronartium comptoniae*, association, *Phellinus pini*, *Pinus banksiana* 548
- rust, *Puccinia melanocephala*, *Saccharum* 1176
- white rot, *Sclerotium cepivorum*, disease control, *Allium cepa*, reviews 1260
- Patulin,**
- antifungal activity, *Saccharomyces cerevisiae* 2070
- ascodiol conversion, *Penicillium urticae* 6690
- biosynthesis, immobilized cells, *Penicillium urticae* 5261
- fungi, carbohydrates effects on antibacterial activity, *Streptococcus bovis* 273
- fungi, incidence, *Beta vulgaris* roots feeds 1089
- Pavo cristatus,**
- feathers, biodegradation, keratinophilic fungi 7555
- Paecilus involutus,**
- mycorrhizas, inoculation, seedlings, trees 5857
- PCB,**
- biodegradation, *Acinetobacter* 8429
- biodegradation, bacteria 2895
- biodegradation, bacteria, rivers sediments isolates 8421
- PCNB,**
- antifungal activity, *Chaenophora cucurbitarum* 4004
- \pm ethazole, antifungal activity, synergism, *Pythium aphanidermatum* 5062
- Pea early-browning virus,**
- + broad bean leaf roll virus + pea enation mosaic virus, interaction role, *Vicia faba* necrosis 7664
- Pea enation mosaic virus,**
- Acyrophosphonum pisum acquisition, infectivity, transmission 2107
- + broad bean leaf roll virus + pea early-browning virus, interaction role, *Vicia faba* necrosis 7664
- disease transmission, *Myzus persicae*, *Acyrophosphonum pisum*, *Pisum sativum* 2101
- infection, *Pisum sativum*, leaves, pathogenesis 3930
- vectors, disease transmission, *Lathyrus odoratus*, *Acyrophosphonum pisum* 342
- Pea streak virus,**
- Acyrophosphonum pisum transmission, *Medicago sativa*, *Pisum sativum* 3908
- Medicago sativa* disease reservoirs 3929
- Peach rosette mosaic virus,**
- infection, *Vitis labrusca*, disease control, vectors, *Xiphinema americanum* 5842
- Peaches,**
- Aspergillus niger*, post-harvest decay, pathogenesis, amino acids, levels 1324
- post-harvest decay, iprodione disease control 4129
- Peanut mild mottle virus,**
- disease transmission, *Arachis hypogaea* 6736
- infection, *Arachis hypogaea*, etiology, China, People's Rep. 9326
- Peanut mottle virus,**
- Arachis chacoense*, isolation, pathogenicity, role, disease reservoirs 6743
- disease resistance, inheritance, *Glycine max* 9463
- infection, *Arachis hypogaea*, *Rhizobium* effects on pathogenesis 5687
- infection, *Lupinus*, epidemics 2985
- infection, *Vigna unguiculata*, epidemiology pathogenesis 3927
- purification methodology, serological tests 7222
- Peanut stunt virus,**
- infection, hypersensitive response, leaves proteins 1333
- infection, *Trifolium repens*, pathology, association, *Aphididae* filters prevention transmission 1147
- infection, *Trifolium repens*, *Phaseolus vulgaris*, USA, Arkansas 1127
- plant viruses, *Leguminosae*, USA, Tennessee, identification 5689
- Peas,**
- allatoxins contamination 3870
- allatoxins food contamination, detection, high-pressure liquid chromatography 3683
- allatoxins removal, sodium chloride + heat treatments 6689
- contamination, allatoxins, quality control 2940
- fatty acids, *Aspergillus*, *Rhizopus*, spoilage effects on 4053
- Pears,**
- post-harvest decay, surfactants, antifungal activity 1323
- Sclerotium rolfsii*, post-harvest decay, pathogenesis, amino acids, levels 1324
- Peat,**
- biodegradation, anaerobic conditions, C/N ratios 9264
- biodegradation, microorganisms 2877
- nitrogen, nutrient levels, mineralization, bogs, particle size, soil microorganisms 8697
- microorganisms, nitrogen cycle, *Medicago sativa* saponins effects on 2355
- soil, freeze-thawing effects on soil microorganisms 580
- Peatlands,**
- Parastacoidea tasmanicus, burrows effects on respiration, soil microorganisms 7803
- Pecans,**
- Carya illinoensis* yield effects on *Aspergillus parasiticus* aflatoxins accumulation 3871
- food contamination, aflatoxins, weather effects on, USA 8672
- Pectate lyase,**
- biosynthesis, *Erwinia chrysanthemi*, water activity relationship 9185
- biosynthesis, *Graphium penicillioidei* 5515
- Phoma exigua* production, role seed rot, *Vigna radiata* 7413
- Pectic esterase,**
- production, *Verticillium albo-atrum*, *Verticillium dahliae*, metals cations effects on 7133
- Pectin,**
- biodegradation, *Hyphomycetes* 3776
- protection, heat resistance, *Lactobacillus fermentum*, tomatoes juices 6660
- use, *Saccharomyces cerevisiae* immobilization, ethanol production association 6631
- Pectin esterase,**
- mechanisms, *Aspergillus foetidus* 9183
- Pectin lyase,**
- Aspergillus niger*, kinetics 1924
- biosynthesis, *Graphium penicillioidei* 5515
- Phoma exigua* production, role seed rot, *Vigna radiata* 7413
- Pectin-degrading bacteria,**
- interaction *Verticillium dahliae*, pectin-degrading bacteria, wilt, *Amaracia rusticana* 1253
- Pectinase,**
- Botrytis cinerea*, *Colletotrichum atramentarium*, *Glomerella cingulata*, fruit rot, *Lycopersicon esculentum* 5797
- Pectinotene,**
- antimicrobial activity 8910
- Pectinesterase,**
- Aspergillus foetidus*, effects on oligo(D-galactosiduronic acids), diazomethane esterification 8251
- citrus sinensis* soft rot, *Aspergillus aculeatus*, *Botryodiplodia theobromae* 3965
- Clostridium thermosulfurogenes*, characterization 4660
- Pectinolytic enzymes,**
- activity, *Penicillium* 9258
- Aspergillus oryzae*, biosynthesis, physicochemical properties 9139
- citrus sinensis* soft rot, *Aspergillus aculeatus*, *Botryodiplodia theobromae* 3965
- Erwinia carotovora*, soft rot, oxygen effects on, potatoes 5033
- Penicillium digitatum*, characterization, use, degradation, *Solanum tuberosum* 1866
- Penicillium expansum* 7419
- production, *Verticillium albo-atrum*, fungicides effects on 7314
- Rhizopus stolonifer* infection, effects on, *Lycopersicon esculentum*, mutants 5773
- Pediococcus,**
- bactericides control, contamination, industrial water systems, breweries 8966
- role, fermentation, wine, pH 2867
- Pediococcus acidilactici,**
- sludge fermentation 3282
- Pediococcus halophilus,**
- corrosion, steel, role dissolved oxygen, sea water 9626
- organic acids metabolism, use, starter cultures, soy sauce 1054
- Pefloxacin,**
- antibacterial activity comparison, nalidixic acid, piperidic acid, flumequin 8761
- Pelargonium,**
- cuttings, wounds healing, stem rot, *Pythium ultimum* 5745
- diagnosis, infection, *Mycoplasma*-like organisms, viruses 2185
- infection, pelargonium petal streak agent, pelargonium net vein agent, pathogenesis 7704
- leavespot, *Pseudomonas cichorii*, pathogenicity 5795
- Pelargonium hortorum,**
- susceptibility, wilt, *Pseudomonas solanacearum*, *Xanthomonas campestris* pv.pelargonii 5012
- Pelargonium net vein agent,**
- infection, Pelargonium, pathogenesis 7704
- Pelargonium petal streak agent,**
- infection, Pelargonium, pathogenesis 7704
- Pelecypoda,**
- indicator species, marine pollution, microbial pollution, measuring techniques 8976
- Pelleting,**
- Aspergillus niger*, morphology, agitation, fermenters 6637
- Pellicularie filamentosa,**
- hydroxylation, steroids, glucose, effects on 6564
- hydroxylation, 11-desoxy-17-hydroxycorticosterone, association, oxygen 4696
- steroids hydroxylation 109
- Pelobacter ventianus sp.nov.,**
- biodegradation, polyethylene glycol 6645
- Penicillin amidase,**
- purification, characterization, *Bacillus sphaericus* 4612
- Pencycuron,**
- toxicity, animal models, Mammalia 3155
- Penicillanic acid sulfone,**
- suicide inhibitors, β -lactamase, gram-negative bacteria 2810
- Penicillium,**
- antibacterial activity, antibiotic resistance, *Haemophilus influenzae*, *Streptococcus pneumoniae* 7985
- antibacterial activity, *Chlamydia* 9714
- antibacterial activity, *Escherichia coli* 7069
- antibacterial activity, *Neisseria gonorrhoeae* 4334
- antibiotic resistance, *Neisseria gonorrhoeae*, plasmids 3270
- antibiotic sensitivity testing, *Clostridium perfringens* 4336
- antibiotic synergism, antibacterial activity, daunomycin transformation, *Streptomyces erythrorhizomycetes* sp.nov. 675
- antibiotic synergism, tetracycline, penicillin, *Rickettsia prowazekii*, *Rickettsia sibirica*, chick embryos 7969
- antibiotic tolerance, *Streptococcus mitior* 1620
- assays, milk 4852
- Bacillus steareothermophilus* var.caldolactis antibiotic sensitivity testing 5180
- Bacteroides fragilis* antibiotic sensitivity testing 7130
- Bacteroides melanogonicus* resistance 4272
- biosynthesis intermediates, isopenicillin N sulfoxide derivatives 8646
- biosynthesis, *Penicillium chrysogenum*, oxygen tension effects on 753
- biosynthesis, *Penicillium chrysogenum*, oxygen tension effects on 1616
- biosynthesis, *Penicillium*, growth, iron effects on 1617
- Campylobacter fetus* subsp.jejuni drug sensitivity testing 4292
- derivatives, synthesis, use, skin tests 8852
- EDTA + tromethamine, antibacterial activity, *Escherichia coli* 8765
- effects on, *Bordetella pertussis* ultrastructure 1599
- effects on *Neisseria meningitidis* morphology 738

Penicillin, (continued)

- effects on *Staphylococcus aureus* cell walls phospholipids content 3380.
fermentation, fungi, biomass measuring techniques, probes 9085.
fermentation, fungi growth monitoring, computer applications, media (culture) 9754.
fermentation, fungi growth monitoring, computer applications, media (culture) 9755.
fermentation models, computer applications, filamentous microorganisms 9756.
Francisella tularensis antibiotic resistance mechanisms 8745.
Neisseria gonorrhoeae antibiotic sensitivity testing 3362.
Penicillium chrysogenum, biosynthesis, phenyl/phenoxacetyl-CoA-ligase kinetics, substrate specificity 2780.
production, Penicillium chrysogenum, mutants, revertants 6154.
resistance, Streptococcus pneumoniae 5155.
sensitivity, Streptococcus animal isolates 5193.
Staphylococcus clinical isolates, susceptibility 3281.
Streptococcus pneumoniae resistance mechanisms 5998.
susceptibility, Streptococcus mitior, dilution tests, factors affecting 5179.

Penicillin amidase,

- Bacillus megaterium, activity mechanisms, conferences 9159.
biosynthesis, Bacillus megaterium constitutive mutant 2802.
purification, characterization, immobilization, Proteus rettgeri 1893.

Penicillin G,

- antibiotic sensitivity testing, Neisseria gonorrhoeae 5240.
antibiotic sensitivity testing, Streptococcus group C, clinical isolates 7147.
effects on Macrophomina phaseolina spore germination 7760.
production, vesicles, immobilized cells, Penicillium chrysogenum protoplasts 2542.
+streptomycin treatment, bacteria infection, cattle, isolates susceptibility 8851.

Penicillin N,

- conversion, association, cephalosporin C, glucose metabolism role, Cephalosporium acremonium 8002.
purification, high-pressure liquid chromatography methodology, Streptomyces clavuligerus 9036.

Penicillin V acylase,

- immobilized enzymes, kinetics 7326.

Penicillin-binding protein,

- affinity cephalosporins antibacterial activity, Bacteroides fragilis 7053.
association, antibiotic resistance, β -lactam antibiotics, Clostridium perfringens 9651.
bacteria, affinity cephalosporins, antibacterial activity 8835.
binding clavulanic acid, sulbactam, effects on antibacterial activity 7134.
cefotetan binding, role antibacterial activity, gram-negative bacteria, gram-positive bacteria 4373.
Escherichia coli, Staphylococcus aureus, binding, monobactams, association, antibacterial activity 3375.
function, structure, role, β -lactam antibiotics resistance, bacteria, reviews 6397.
purification, characterization, Streptococcus pneumoniae 912.
relationship, autolysins activity, β -lactam antibiotics antibacterial activity 6088.
role, antibiotic resistance, penicillins, Streptomyces cacaoi mutants 3297.
role, Streptococcus group D antibiotic resistance, β -lactam antibiotics 4273.
Streptococcus mutans, Streptococcus sanguis, antibacterial activity, cefoxitin, mecillinam 7135.

Penicillins,

- antibacterial activity 6150.
antibacterial activity 9709.
antibacterial activity, Protease 5196.
antibacterial activity, Pseudomonas, β -lactamase activity, disc-diffusion test, inhibition 7145.
antibacterial activity, Pseudomonas aeruginosa 741.
antibacterial activity, Streptococcus faecalis 8822.
antibiotic antagonism, cefoxitin, antibacterial activity, ceftizoxime, Pseudomonas 2533.
antibiotic antagonism, chloramphenicol, rifampicin, Listeria monocytogenes 5247.
antibiotic resistance, Staphylococcus aureus 3290.
antibiotic resistance, Streptomyces cacaoi mutants, role, penicillin-binding protein 3297.
antibiotic sensitivity testing, clinical isolates 742.
antibiotic sensitivity testing, gram-negative bacilli 8001.
antibiotic sensitivity testing methodology, factor affecting 6305.
antibiotic sensitivity testing, Propionibacterium acnes, clinical isolates 3381.
antimicrobial activity, mechanisms 9725.
biological properties, chemical properties, books 8182.
comparison, mezlocillin, antibacterial activity, gram-negative bacteria, gram-positive bacteria 6141.
comparison, Penicillium interspecific hybridization 749.
comparison, Penicillium interspecific hybridization 749.
derivatives, synthesis, antibacterial activity 6097.
effects on inorganic pyrophosphatase levels, Escherichia coli cell division temperature-sensitive mutant 8000.
+mezlocillin antibacterial activity synergism, gram-negative bacteria 7058.
Pseudomonas paucimobilis, antibacterial activity, drug resistance 2512.
resistance, population studies, Escherichia coli, Enterobacter cloacae 629.
semisynthetic, antibacterial activity, gram-negative bacteria, Enterobacteriaceae 746.
semisynthetic, antibiotic synergism, aminoglycoside antibiotics, antibacterial activity, Enterobacteriaceae 7125.
separation techniques, thin-layer chromatography 2549.
standardization assays 4380.
structure-activity relationships, conformation 8818.

Penicillium,

- antibiotics fermentation, detection, bacteria contamination, Bactec test 8824.
biodegradation, phospholipids, triacylglycerols, cholesterol 2881.
chemicals, antifungal activity 3336.
Citrinin detection, chromatography, grain 7589.
contamination, cigarettes, Cannabis sativa 8172.
contamination, feeds, mycotoxins 3868.
contamination, kiwifruit post-harvest decay, USA, California 5031.
corn spoilage, storage 2069.
dextranase electrophoresis 8249.
disease control, factors affecting, barley storage 7724.
distribution, feeds, radiation disinfection 7605.
extracellular enzymes, polygalacturonase biosynthesis 1922.

Penicillium, (continued)

- food contamination, fruit juices, Venezuela 7574.
food contamination, Gramineae, post-harvest decay 2236.
glutathione oxidase purification, characterization 4621.
grains, nutritive value, chickens 3852.
growth, penicillin biosynthesis, iron effects on 1617.
incidence, association, heavy metals gradients, soil, Sweden 6698.
incidence, drinking water systems 1722.
infection, Triticum aestivum seeds, relationship germination 8600.
interspecific hybridization, penicillins comparison 749.
invasion, Trifolium repens 5692.
lignosulfonate, metabolism, media (enrichment), biodegradation 3797.
microbiology, biomass, uranium, pH 8969.
patulin, incidence, Beta vulgaris roots feeds 1089.
pectinolytic enzymes activity 9258.
phosphate solubilization, organic acids, soil 3187.
populations, South Africa Rep. plains 4217.
post-harvest decay, corn, genetic analysis 9451.
potassium sorbate resistance, cheese isolates 659.
protoplasts fusion, interspecific hybridization, strains selection 5439.
rhizosphere microorganisms, phytotoxins, phytotoxins inhibition roots growth, Malus pumila 4141.
soaps contamination 2641.
spoilage effects on seeds germination, Vigna catung 3919.
starter cultures, poultry sausages 3814.
submergence, water pollution effects on 8977.
tannins soil amendment effects on, respiration, glucose oxidation 593.
uranium mobilization, mycelia growth, rocks 7014.
- Penicillium admetzi,**
ultrasonic transformation 7465.
- Penicillium atatum,**
waste treatment, ethanol fermentation wastes, by-products recovery 9803.
- Penicillium chrysogenum,**
agmatine oxidase, purification, characterization 1861.
Mentha piperata, extracts, antifungal activity 2479.
mixed culture, lignocellulose biodegradation 3772.
mutants, revertants, penicillin production 6154.
mycelia, mannitol dehydrogenase purification, characterization, industrial wastes isolates 5514.
mycelia morphology, association, beads 9985.
oxygen tension effects on penicillin biosynthesis 753.
oxygen tension effects on penicillin biosynthesis 1616.
phenyl/phenoxacetyl-CoA-ligase, purification, kinetics, penicillin biosynthesis 2780.
phostolant biodegradation 5566.
protoplasts, immobilized cells, vesicles, penicillin G production 2542.
rheology, liquid culture 9070.
tannase, isolation, purification, characterization 7429.
ultrasonic transformation 7465.
use, antibiotics production, reviews 5238.
- Penicillium citreoviride,**
dipicolinic acid biosynthesis, role, survival 7445.
- Penicillium citrinum,**
fensufothion biodegradation 7538.
nutrient requirements, citrinin, biosynthesis 2064.
post-harvest decay, sorghum, stored products, effects on growth, Insecta 5799.
- Penicillium commune,**
mycelia, amino acid composition, single-cell protein, feeding trials, rats, rabbits 4858.
nitrogen constituents 4714.
- Penicillium corylophilum,**
biosynthesis, agroclavine-1, epoxystroclavine-1 1973.
straw, cellulose biodegradation 3216.
- Penicillium crustosum,**
alkaloids mycotoxins production, beer contamination 8503.
biosynthesis, penitrem, roquefortine 4896.
penitrem A, biosynthesis, association, acetic acid, N.M.R. 6700.
- Penicillium cyclopium,**
hormones, P-factor 3705.
- Penicillium digitatum,**
+Geotrichum candidum, infection synergism, citrus 440.
green mold, oranges, antifungal activity comparison, thiabendazole, sodium orthophenylphenate, CGA-64251 1319.
green mold, oranges, post-harvest decay, imazalil treatment 9452.
infection, Emblica officinalis, ascorbic acid content 3964.
mycelia biomass use, solution uranium removal 9628.
oranges, spoilage synergism, association benzimidazole sensitivity 1318.
pectinolytic enzymes 5528.
pectinolytic enzymes, characterization, use, degradation, Solanum tuberosum 1866.
wound infection, citrus, post-harvest decay resistance 5802.
- Penicillium diversum,**
austin metabolites structure, N.M.R. use 4898.
- Penicillium expansum,**
blue mold, benomyl, disease control, association, stem rot, Alternaria alternata, Pyrus communis 9373.
cross-resistance, iodine, association fenarimol resistance 7022.
infection, Zea mays, propionic acid effects on growth 6746.
osmotic pressure, sensitivity, association, dicarboximide, resistance 6022.
pears post-harvest decay, antifungal activity, surfactants-chlorine 1323.
pectinolytic enzymes 7419.
post-harvest decay, calcium chloride, disease control, apples 5798.
post-harvest decay, Malus domestica, calcium, effects on 8598.
post-harvest decay, prunes 5801.
spoilage, mycotoxins contamination, preservation, corn 5643.
use, thin-layer chromatography, bioassays, B-D-glucosidase, activity 7270.
viridicatumtoxin biosynthesis 6696.
- Penicillium funiculosum,**
cellulase, β -D-glucosidase, exo-cellulohydrolase, immobilization, use, poly(vinyl alcohol) 8315.
cellulase, glucose, recovery, cellulose hydrolysis 7335.
cellulase production, fermenters 3677.
cellulase recovery, separation techniques association glucose, use, poly(acrylate) gels 8313.
cellulose biodegradation, rheology 168.
cellulose pretreatment, cellulase hydrolysis 7542.
dextranase, carbohydrate composition 7340.

Penicillium funiculosum, (continued)

- exo-1,4- β -D-glucosidase, purification, characterization 6401.
 β -D-glucosidase, immobilized enzymes, characterization 4584.
 • Saccharomyces uvarum, ethanol production, cellulose, fermentation, hydrolysis 8401.
 soil fungistasis 3179.
 triacylglycerol lipase biosynthesis, growth conditions 4656.
- Penicillium gladioli**,
 2,3-dicarboxy-4-methoxy-5-methylbenzoic acid biosynthesis, naphthomycin A biodegradation 12.
- Penicillium italicum**,
 cross-resistance, dodecane, association fenarimol resistance 7022.
 fenpropimorph toxicity, disease control, post-harvest decay, oranges 4908.
 quazoline resistance, New Zealand 7880.
 thiabendazole, resistance, blue mold, oranges 6009.
- Penicillium janthinellum**,
 biomass production, fermentation, straw, *Oryza sativa* 7564.
 growth, protein biosynthesis, use, straw 8211.
- Penicillium jensenii**,
 association cryptogams, North America deserts soil, characterization 5887.
- Penicillium multicolor**,
 tetrionic acids, sodium acetate incorporation, oxygen distribution 7287.
- Penicillium nigricans**,
 infection, *Pseudotsuga menziesii* roots, incidence 4162.
 soil microorganisms, growth, spore germination, ammoniac, volatiles, effects on 2349.
- Penicillium oxalicum**,
 roquefortine, biosynthesis, association, oxaline 6698.
- Penicillium paraherquelii**,
 Paraherquonin, isolation, structure 8376.
- Penicillium purpurascaens**,
 biodegradation, straw, role, soil, volcanic ash, stabilization 5091.
- Penicillium raistrickii**,
 verruculogen, biosynthesis, characterization 2071.
- Penicillium roqueforti**,
 fermentation, mathematical models 3809.
 infection, *Zea mays*, propionic acid effects on growth 6746.
 isopae production, factors affecting 7338.
 mycophenolic acid biosynthesis, strains specificity 982.
 toxins biosynthesis 6695.
- Penicillium rubrum**,
 leaf litter biodegradation 3771.
- Penicillium simplicissimum**,
 biodegradation, ethanolol 167.
- Penicillium stecklii**,
 linamarase, detoxification, cassava fermentation 4778.
- Penicillium urticae**,
 ascladiol conversion, patulin 6690.
 immobilized cells, patulin biosynthesis 5261.
- Penicillium verrucosum var. cyclopium**,
 ochratoxin A biosynthesis, wheat 2062.
 pathogenesis, *Brassica campestris*, fluorescence, microscopy 2188.
 verrucosidin, structure 6691.
- Penicillium verruculosum**,
 production, cellulolytic enzymes 3697.
 soil, herbicides effects on 8707.
- Penicillium viridicatum**,
 media (selective), cereals food contamination 7269.
 ochratoxin A biosynthesis, barley 1102.
 ochratoxin A, occurrence, temperature, relative humidity, effects on 7624.
 thiomersolmin isolation, purification, high-pressure liquid chromatography 7264.
- Penicillium wortmannii**,
 exo-1,4- β -D-xylosidase, purification, physicochemical properties, kinetics 6438.
- Peniophora laeta**,
 marasmic acid, effects on, RNA biosynthesis, DNA biosynthesis 6083.
- Pericon A**,
 biosynthesis, association, acetic acid, N.M.R., *Penicillium crustosum* 6700.
- Penitremis**,
 biosynthesis, *Penicillium crustosum* 4896.
- Pennisetum**,
 incidence, *Azospirillum*, rhizosphere microorganisms, tropical environment 7853.
- Pennisetum americanum**,
Azospirillum brasilense acetylene reduction 385.
 cultivars, genotype-environment interactions, pathogenicity, downy mildew, *Sclerospora graminicola* 6755.
 cultivars, germplasm, susceptibility, maize dwarf mosaic virus 9360.
 cytoplasmic male sterility, plant breeding, susceptibility, downy mildew, *Sclerospora graminicola* 5807.
 disease resistance, *Tolyposporium penicillariae* smut, field trials screening 9455.
 downy mildew, *Sclerospora graminicola*, pathogenicity, statistical analysis 6756.
 pollination, effects on, smut, *Tolyposporium penicillariae*, pathogenesis 6777.
 rhizosphere, nitrogen fixation, nitrogen-fixing bacteria 9612.
Sclerospora graminicola downy mildew, fungicides disease control 4116.
Sclerospora graminicola heterothallicism 404.
 seed treatments, metaxialy, disease control, *Sclerospora graminicola* downy mildew 9502.
- Pennisetum typhoides**,
 leafspot, *Pyricularia penicillii*, air spora, analysis 4000.
Sclerospora graminicola downy mildew, germplasm disease resistance, productivity 473.
- Pennisetum typhodeum**,
Claviceps fusiformis ergot, incidence, relationship planting time 5712.
 downy mildew, *Peronosclerospora*, *Sclerospora graminicola*, epidemiology 1186.
- Pentachlorobenzyl alcohol**,
 blast, *Oryza sativa*, effects on *Pyricularia oryzae* pathogenesis 5827.
- Pentachloronitrobenzene**,
 metabolites, antifungal activity 8789.
- Pentachlorophenol**,
 biodegradation, *Arthrobacter* 5583.
 biodegradation, *Arthrobacter*, soil 2891.
 effects on electron transport, soil microorganisms 2378.
- Pentactintra macrophylla**,
 seeds, fermentation, bacteria 6675.

Pentalenolectone,

- structure, isolation, *Streptomyces* 6205.
- Pentaionia nigronervosa**,
 disease transmission, viruses, bunchy top, *Musa paradisiaca* 7677.
- Pentamethoprim**,
 antibacterial activity 8779.
- Pentas lanceolata**,
 tomato mosaic virus infection, new records, Australia 9450.
- Pentosans**,
 hydrolysis, slurries systems 9262.
- Pentoses**,
 conversion, yeasts, ethanol production 9236.
 fermentation, yeasts, ethanol production 4728.
 inactivation, phase 9X174, tobacco mosaic virus 701.
- Peperomia**,
 leafspot, *Myrothecium roridum* 5747.
- Pepper mild mosaic virus**,
 infection, *Capsicum annuum*, purification, characterization 409.
- Pepper mottle virus**,
 disease resistance, genetic relationship, disease tolerance, *Capsicum annuum* x *Capsicum chinense* 4093.
- Pepper vein banding virus**,
 infection, *Capsicum annuum*, epidemiology 3034.
- Pepper vein mottle virus**,
 characterization, infection, *Solanum melongena* 2159.
 infection, *Physalis angulata*, symptoms, Ivory Coast 1235.
- Pepsin**,
 assays 8276.
 biosynthesis, *Rhizopus chinensis*, liquid culture 100.
- Peptatin**,
Rhizopus chinensis, proteinase complex, X-ray diffraction 1904.
- Peptidases**,
 Candida albicans, column chromatography, electrophoresis, colorimetry 6542.
- Peptide antibiotics**,
 polythiazole containing, characterization, reviews 1682.
 trostin, molecular weight 6211.
- Peptide mapping**,
 edeine D, synthesis 9780.
 Erysiphe graminis f.sp. tritici, *Colletotrichum lindemuthianum* 925.
 phosphofructokinase subunits, *Saccharomyces cerevisiae* 941.
- Peptide synthesis**,
 acetyl-CoA carboxylase biotin binding sites, interaction, magnesium, N.M.R., Escherichia coli 4632.
 gramicidin S analogs 5264.
 gramicidin S, analogs, structure-activity relationships, antibacteria activity, gram-negative bacteria 9786.
Streptomyces peptides immunostimulants 919.
- Peptides**,
 alanine, binding erythromycin A, antibacterial activity 1632.
 bonds cleavage, prothionin decarboxylase, histidine decarboxylase conversion, *Lactobacillus* 4595.
 lactobacillus hydrolyase, production, factors affecting 1941.
Streptomyces, immunostimulants, biological properties 921.
Streptomyces, immunostimulants, peptide synthesis 919.
Streptomyces, immunostimulants, structure 918.
- Peptidoglycan**,
Bacillus coagulans, structure, linkage galactosylglycerol phosphate 5532.
 biosynthesis, role, methicillin, antibiotic resistance, *Staphylococcus aureus*, septa 5148.
 biosynthesis, role, phospho-N-acetyluramoyl-pentapeptide-transferase, amphomycin, inhibition, *Bacillus megaterium* 1561.
 biosynthesis, *Streptococcus mutans*, *Streptococcus sanguis*, antibacterial activity, cefoxitin, mecillinam 7135.
 Brevibacterium divaricatum, biosynthesis, biotin stimulation 1957.
 conformational analysis, bacteria cell walls 3714.
 N.M.R., *Brevibacterium divaricatum* 7441.
 structure, *Propionibacterium* 7442.
- Peptococcus**,
 clinical isolates, incubation, anaerobic environments 2680.
 compound U-57930E antibacterial activity 4379.
 infection, cephradine, treatment, in vitro antibacterial activity 676.
 nridazole antibacterial activity 3328.
- Peptones**,
Vibrio parahaemolyticus, effects on amylase biosynthesis 1942.
- Peptostreptococcus**,
 clinical isolates, incubation, anaerobic environments 2680.
 infection, cephradine, treatment, in vitro antibacterial activity 676.
- Peptostreptococcus anaerobius**,
 glucose concentrations effects on fermentation products 4551.
 survival, swine transport system, temperature association 6334.
- Peptostreptococcus productus**,
 β -hydroxysteroid dehydrogenase (NADP⁺) purification, characterization 958.
 β -hydroxysteroid dehydrogenase, purification, characterization 2776.
- Peracetic acid**,
 antibacterial activity, antifungal activity 7088.
 antifungal activity, foot rot, pathogens, *Gramineae* 1394.
- Percolation**,
 reactors, hemicellulose hydrolysis, biomass conversion, mathematical models 9194.
 β -(Perfluoroalkyl)- β -ketosteres,
 reduction, *Saccharomyces cerevisiae* 9221.
 β -(Perfluoroalkyl) ketones,
 reduction, *Saccharomyces cerevisiae* 9221.
 β -(Perfluoroalkyl)vinyl compounds,
 reduction, *Saccharomyces cerevisiae* 9221.
- Periconia circinata**,
 phytotoxins, effects on cytology, mitosis, roots, seedlings, *Sorghum vulgare* 8344.
 phytotoxins, effects on ultrastructure, plasma membranes, roots, *Sorghum vulgare* 8345.
- Periconia sarawatiipurensis**,
 pectin biodegradation 3776.
- Peridermium bethellii**,
 rust, association, *Arceuthobium americanum*+*Pinus contorta* 6932.
- Peridental diseases**,
 roots surfaces, citric acid, antibacterial activity 2457.

- Periodontal diseases**,
association, oral hygiene, man, Tuvalu 8078.
bacteria, prophylaxis, oral hygiene, man 1733.
isolates, bacteria, antibiotic sensitivity testing 3376.
man, dental plaque, disease control, spiramycin 3505.
- Periodontitis**,
oral microflora, sodium bicarbonate+hydrogen peroxide effects on man 5353.
- Periplaneta americana**,
vectors, spores, *Botryodiplodia theobroma*, yams, post-harvest decay 442.
- Periplaneta species**,
L-arabinose-binding protein, galactose-binding protein, purification,
characterization, *Escherichia coli* 6374.
maltose-binding protein, purification, characterization, *Escherichia coli* 6373.
Rhizobium trifolii, β -D glucosidase, β -D galactosidase, purification,
characterization 5499.
- D-xylose-binding protein**, purification, characterization, *Escherichia coli* 6376.
- Pertinacea**,
Kretschmaria clavus, relationship, root rot, *Macadamia integrifolia* 5731.
production, *Gaeumannomyces graminis* var. *tritici*, methodology 2721.
- Pernethrin**,
biodegradation, soil microorganisms 9531.
disease control, *Rhizoctonia solani*, Glycine max 8625.
effects on *Acyrtosiphon pisum*, feeding behavior, potato leaf roll virus, disease
transmission 8526.
- Perna canaliculus**,
pollution detection, water pollution, microbial pollution, enterovirus 3516.
- Peronosclerospora**,
downy mildew, *Zea mays*, *Sorghum vulgare*, *Pennisetum typhoides*, epidemiology,
reviews 1186.
- Peronosclerospora philippinensis**,
host range, Gramineae, comparison, *Peronosclerospora sacchari* 6753.
- Peronosclerospora sacchari**,
host range, Gramineae, comparison, *Peronosclerospora philippinensis* 6753.
- Peronosclerospora sorghii**,
downy mildew, disease resistance, plant breeding, *Sorghum vulgare* 4061.
downy mildew, host range, Gramineae 5700.
downy mildew resistance, *Zea mays*, gemplasm, population genetics 9626.
downy mildew, symptoms, *Zea mays* 2122.
infection, *Zea mays*, pathogenesis, association disease resistance 4085.
oospores formation, *Zea mays*, India 3018.
oospores, infection, *Zea mays*, seedlings, inoculum, methodology 8551.
types, differentiation, use, *Sorghum bicolor* leaves 3936.
- Peronospora**,
infection, *Dianthus*, pathogenesis 7714.
- Peronospora effusa**,
blue mold, disease resistance, genetic analysis, *Spinacia oleracea* 1337.
downy mildew, seed-borne diseases, *Spinacia oleracea* 9423.
- blue mold, *Spinacea oleracea* disease control, metalaxyl+chlorothalonil treatment
5064.
- Peronospora hyoacymali**,
blue mold, treatment, metalaxyl, *Nicotiana tabacum* 2287.
infection, *Nicotiana tabacum*, susceptibility, metalaxyl 4126.
metalaxyl resistance, blue mold, disease control, *Nicotiana tabacum* 5063.
- Peronospora manshurica**,
downy mildew, peroxidase activity, leaves, *Glycine max* 346.
- Peronospora parasitica**,
downy mildew, disease resistance, *Brassica napus* 8609.
downy mildew, disease resistance, *Brassica napus*, *Brassica oleracea* 4056.
downy mildew, fungicides disease control, *Brassica pekinensis* 8631.
- Peronospora sparsa**,
infection, *Rubus*, oospores characterization 3997.
- Peronospora tabacina**,
blue mold, spores release, wind, disease spread, *Nicotiana tabacum* 4995.
- Peronospora trifoliorum**,
downy mildew, *Medicago sativa*, USA, Wyoming 9330.
leafspot, *Medicago sativa* 5670.
- Peronospora viciae**,
downy mildew, penetration, disease resistance, *Pisum sativum* 3142.
sporulation, downy mildew, disease resistance, *Pisum sativum* cultivars 3141.
- Peroxidase**,
activity, leaves, *Glycine max*, downy mildew, *Peronospora manshurica* 346.
activity, soils (organic) 9525.
Armoracia lapathifolia, use enzyme-linked immunosorbent assay, hepatitis B
surface antigen 825.
 \pm hydrogen peroxide, inactivation, aflatoxin M1, milk 285.
induction, *Nicotiana tabacum* tissues, tobacco necrosis virus infection 318.
Nicotiana tabacum, role disease resistance, tobacco mosaic virus, potato virus X
2162.
role hypersensitive response, disease resistance, tobacco mosaic virus, *Nicotiana
tabacum* 1374.
Vigna sinensis, *Cucumis sativus*, tobacco necrosis virus infection, osmotic stress
effects on 413.
- Peroxidation**,
Nicotiana tabacum cell membranes, *Cercospora nicotianae* cercosporin role 9442.
- Peroxisomes**,
Cymbidium ring-spot virus infection, *Nicotiana glauca*, effects on, vesicles,
formation 4027.
- Persea americana**,
avocado sunblotch disease viroid infected leaves, RNA detection 3028.
1-cetoxy-2-hydroxy-4-oxo-heneicos-12,15-diene, antifungal activity,
Colletotrichum gloeosporioides, post-harvest decay 2471.
etiology, viruses, streak 9372.
Verticillium wilt incidence, Chile 5737.
- Persea gratissima**,
prochloraz, disease control, anthracnose, stem rot 6833.
- Persea indica**,
calcium nitrate, ammonium sulfate, effects on, root rot, *Phytophthora cinnamomi*
2147.
- Pertussis**,
toxins biosynthesis, *Bordetella pertussis*,
heptakis(2,6-O-dimethyl)- β -cyclodextrin effects on 8523.
- Perru**,
Triticum aestivum, incidence, *Pryonophora tritici-repentis* spot 9356.
- Perylene**,
biodegradation, composting 2875.
- Peat**,
cellulose decomposition 2879.
- Pest attack**,
Cucumis stem blight epidemiology, relationship 1248.
plant diseases, infection susceptibility, *Pinus contorta*, *Euophium clavigerum*,
Dendroctonus ponderosae 8651.
Scolytidae, susceptibility, *Heterobasidion annosum*, *Verticillium*, root rot,
Pinus ponderosa 5865.
- Pest control**,
Bacillus sphaericus spores, spore crystals, toxicity, *Culex quinquefasciatus*
1035.
Bacillus thuringiensis, *Dioryctria amatella*, persistence, *Pinus taeda* 7484.
baculovirus, biological control, *Lepidoptera* 998.
baculovirus, persistence, *Insecta* 1005.
biological control, *Bacillus thuringiensis*, *Culicidae* 297.
biological control, *Bacillus thuringiensis*, pathogens, *Insecta* 999.
biological control, *Bacillus thuringiensis*, *Stilpnitis salicis* 3718.
biological control, *Entomophthorales*, *Insecta* 1000.
biological control, *Fusarium moniliforme* var. *subglutinans*, *Hemosepiachna
vigintioctopunctata* 1034.
biological control, *Hyphomycetes*, *Insecta* 1003.
biological control, *Leguminosae*, *Culicidae* 1014.
biological control, myxoma virus, *Oryctolagus cuniculus* 6823.
biological control, nuclear polyhedrosis virus, *Lymantria dispar* 7476.
biological control, pathogens, conferences 1819.
biological control, pathogens, *Insecta* 988.
biological control, viruses, dispersal, *Arthropoda* 989.
biological control, viruses, *Nematocera* 1016.
captan, compatibility, *Bacillus thuringiensis*, stored products, *Ephestia
cautella*, *Diaera interpunctella* 7495.
captan, compatibility, *Bacillus thuringiensis*, stored products, *Ephestia
cautella*, *Diaera interpunctella* 8351.
cultivation, *Basidiomycetes* 2046.
1,3-dichloropropene, *Nematoda*, relationship viruses reservoirs, *Fragaria ananassa*
disease control 9473.
Heliothis virescens, nuclear polyhedrosis virus, *Cicer arietinum* extracts,
feeding behavior stimulants 6598.
Heliothis zea nuclear polyhedrosis virus, *Heliothis* 1041.
Insecta, biological control, pathogens, methodology, dissemination, fungi 994.
nuclear polyhedrosis virus, *Hyphantria cunea* 1044.
nuclear polyhedrosis virus, mortality, *Heliothis virescens* 7224.
pathogenicity, *Bacillus thuringiensis*, *Culicidae* 296.
pathogenicity, environmental effects, *Bacillus thuringiensis*, *Culex pipiens*,
Aedes aegypti 295.
pathogens, biological control, foliar applications, crop fields, *Insecta* 992.
pathogens, biological control, foliar applications, *Insecta* 993.
pathogens, biological control, foliar applications, methodology, crop fields,
Arthropoda 991.
pathogens, fungi, *Insecta* 995.
pathogens, *Metarhizium anisopliae*, biological control, *Nasutitermes exitiosus*
7502.
pathogens, safety regulations 1025.
pathogens, viruses, baits, *Insecta* 990.
Streptomyces avermectilis avermectin, reproduction inhibition, *Solenopsis invicta*
1094.
toxicity, bacteria, *Simuliidae* 298.
Nucleospora vaporarum, biological control, *Verticillium lecanii* 126.
virulence, bioassays, *Entomophthorales*, *Insecta* 1001.
Zoophthora radicans pathogens, *Therioaphis trifolii* maculata 1033.
- Pest resistance**,
genes, disease control, tungro virus, *Nephotettix virescens*, *Oryza sativa* 5548.
- Pestalotia foedans**,
bile acids conversion 3798.
- Pestalotiopsis glandicola**,
cellulose hydrolysis, amino acids, carbohydrates effects on 7547.
- Pestalotiopsis versicolor**,
cellulase fermentation 9155.
leaf blotch, fruit rot, *Punica granatum* 7680.
- Pestalozzia palmarum**,
leafspot, disease control, fungicides, *Cocos nucifera* 1391.
- Pesticide applications**,
carbafuran, fonofos, soil characteristics, pesticide residues, soil
microorganisms 8705.
disease control, leaf blight, *Cucumis melo*, factors affecting 3150.
larvicides, equipment, methodology, *Bacillus thuringiensis*, *Culicidae* 9204.
soil, carbafuran, disease transmission, maize chlorotic dwarf virus, maize dwarf
mosaic virus, *Graminella nigrifrons*, *Rhopalosiphum maidis* 7738.
- Pesticide residues**,
carbaryl, soil microorganisms biodegradation, nutrient requirements, flooded
soils 9620.
carbafuran, fonofos, pesticide applications, effects on soil microorganisms 8705.
chlorothalonil deposition, *Solanum tuberosum*, mathematical models 1407.
chlorothalonil deposition, *Solanum tuberosum*, mathematical models 1408.
2,4-D, pollution effects, soil microorganisms, respiration, nitrogen fixation
9621.
nitrofen, biodegradation, persistence, mobility, soil microorganisms, *Canada*
8704.
- Pesticides**,
antibacterial activity, nitrogen-fixing bacteria, *Eichloria crassipes* isolates
8770.
antibacterial activity, *Rhizobium japonicum* 9670.
biodegradation, soil microorganisms 9531.
biodegradation, soil microorganisms, mathematical models 161.
effects on β -D-fructofuranosidase, α -amylase, ATP activity, soils
(organic) 3247.
paddy fields soil, effects on nitrogen fixation, heterotrophic bacteria 619.
resistance, fungi, fungicides exposure 9639.
+rhizosphere microorganisms+phytotoxins, etiology, decline, *Zea mays* 367.
soil microorganisms respiration, effects on 5908.
toxicity, soil microorganisms, *Azotobacter* 4253.
uptake, *Pinus*, disease control, wilt, *Bursaphelenchus xylophilus* 5877.
wastewater treatment, effects on activated sludge 6240.

Subject Index

- Pesticides (organophosphorus),**
derivatives, O-dimethyl phosphorodithioate, biodegradation, *Pseudomonas*,
Thiobacillus thioautotrophicus 3787.
effects on, anthracnose, *Colletotrichum gloeosporioides*, cutinase, activity,
Canca papaya 8563.
hydrolysis phosphatase, purification, *Alcaligenes* 2773.
inhibition, *Fusarium solani* f.sp.ipsi, cutinase, penetration, *Pisum sativum* 2279.
- Pesticin,**
Yersinia pests, production, synthetic media 1680.
- Pests,**
damage, crop fields, Aphididae, *Triticum* 3001.
Ostrinia nubilalis, infestation, relationship stalk rot, *Gibberella zeae*,
Fusarium graminearum, *Zea mays* 9349.
Triticum aestivum, control, insecticides 2273.
- Pette mutant,**
Saccharomyces cerevisiae, sugar fermentation ability 9247.
- Petri dishes,**
assays, *Candida albicans*, phospholipase, extracellular enzymes 7327.
- Petriella guttulata,**
antibiotic WF-3161 biosynthesis, isolation, characterization, antifungal
activity, *Trichophyton* steroids, antitumor activity 7451.
- Petroleum,**
biodegradation, *Candida tropicalis*, *Yarrowia lipolytica* 5992.
biodegradation, *Mycobacterium* 7869.
biodegradation, *Pseudomonas desmolyticum*, sulfur metabolism 5991.
biodegradation, sulfur bacteria 2015.
contamination, microorganisms, analysis 5139.
contamination, microorganisms, sulfate-reducing bacteria, *Cladosporium resinae*
5140.
effluents, digestion (anaerobic), bioreactors 5287.
industrial sites, industrial wastes, environmental effects, bibliographies 2609.
oil gas industry, wastewater treatment 6250.
sand, soil microorganisms, respiration, biomass 5916.
soil microorganisms biodegradation, industrial wastes, oil and gas industry, land
disposal 5983.
sulfur compounds, biodegradation, bacteria 5597.
use, single-cell protein production, microorganisms 2930.
- Petrorhiza hortense,**
cell culture, fungi infection, phytoalexins biosynthesis enzymatic activity 5767.
cell culture, fungi infection, phytoalexins induction 5765.
- Petunia asteroid mosaic virus,**
comparison, *tombusvirus* isolation, *Prunus*, identification 390.
- Petunia hybrida,**
sour cherry necrotic ring spot virus infection 2144.
- Pezizula malicorticis,**
canker, disease resistance, *Malus pumila* 1357.
- pH,**
association, *Botryospheria dothidea* white rot development, *Malus* 4975.
Candida guilliermondii continuous culture 2725.
Cercospora rosicola, effects on abscisic acid production 2731.
ectomycorrhizas growth relationship 5900.
effects on acetone, butanol, production, *Clostridium acetobutylicum* 5563.
effects on, asparaginase, inactivation, *Saccharomyces cerevisiae* 5519.
effects on *Aspergillus terreus* cellulase biosynthesis 3663.
effects on assays, p-D-fructofuranosidase, amylase, *Chionochloa rigida*
grasslands soil, New Zealand 9565.
effects on *Campylobacter fetus* subsp. *jejuni* media (enrichment), isolation,
poultry 8141.
effects on cellulolytic enzymes adsorption, wood hydrolysis 7548.
effects on *Clostridium botulinum* growth 8497.
effects on, *Clostridium botulinum*, toxigenicity 308.
effects on enzymes activity, soil 2338.
effects on hepatitis A virus, indicator species, inactivation, chlorine,
disinfection, drinking water 9812.
effects on hydrogenase activity, *Clostridium pasteurianum* 5492.
effects on ketoconazole antifungal activity, *Candida albicans* 3334.
effects on ketoconazole antifungal activity, *Candida albicans*, *Candida*
parapsilosis 5201.
effects on, *Micromonospora inyoensis*, *isomycin* biosynthesis 6229.
effects on novobiocin antibacterial activity 6228.
effects on *Propionibacterium* continuous culture, biomass, growth rate,
extracellular enzymes production 7312.
effects on, *Rhizobium meliloti*, nodulation, *Medicago sativa* 3238.
effects on, rifamycin B biosynthesis, *Nocardia mediterranei* 6165.
effects on, *Salmonella typhimurium*, *Escherichia coli*, growth, animal wastes, pigs
8954.
effects on *Staphylococcus aureus* antibiotic tolerance, oxacillin 3408.
effects on *Staphylococcus aureus* survival, freeze-thawing, meat 4816.
effects on subtilisin conformation, C.D., fluorescence, kinetics, *Bacillus*
subtilis 89.
effects on, survival, *Campylobacter fetus* subsp. *jejuni*, *Campylobacter fetus*
subsp. *intestinalis*, skim-milk, beef 217.
effects on, wastewater treatment, industrial effluents, breweries 4438.
effects on yeasts, biomass production, fermenters 4539.
effects on, *Yersinia enterocolitica*, survival, growth, yogurt 1080.
endo-polygalacturonase characterization, *Trichosporon penicillium* 91.
fermentation, wine, role, *Leuconostoc oenos*, *Pediococcus* 2867.
intracellular levels, phagolysosomes, phagocytosis, *Staphylococcus aureus*,
bactericidal activity, aminoglycoside antibiotics, rifampicin 9733.
media (culture), effects on *Legionella pneumophila* isolation 9953.
meat, meat, effects on food contamination, *Pseudomonas aeruginosa* 4795.
Penicillium, microbiology, biomass, uranium 8969.
relationship, N,N-dimethylhydodanamine antibacterial activity 5175.
salt marshes soil, effects on denitrification 2367.
stability, aflatoxin M1, milk 8505.
-sulfur dioxide, effects on, *Leuconostoc oenos*, fermentation, wine 3761.
tolerance, *Yersinia enterocolitica*, relationship, nutrient enrichment, isolation,
methodology 8475.
topography, *Endomyces magnusii*, fluorescent probes methodology 8169.
- Phacidium infestans,**
blight, *Pinus sylvestris* survival, reforestation 4164.
- Phaeobacter test,**
detection, *Haemophilus influenzae* cerebrospinal fluid, meningitis diagnosis 9941.
- Phaeocryptopus gaeumannii,**
infection, *Pseudotsuga menziesii*, Canada 7785.
needlecaster, infectivity, relationship, *Pseudotsuga menziesii* developmental
- Phaeocryptopus gaeumannii, (continued)**
stages, USA, Washington 6928.
needlecaster, *Pseudotsuga menziesii*, disease control, aerial applications,
chlorothalonil, USA, Washington 6879.
- Phaeodactylum tricornutum,**
comparison, *Skeletonema costatum*, extracts, antibacterial activity,
Staphylococcus 7162.
- Phaeoisariopsis griseola,**
plants diseases, new records, New Zealand 3899.
- Phaeosporia eucalypti,**
leafspot, *Eucalyptus*, New Zealand 7706.
- Phaeotrichoconis crotalariae,**
leafspot, *Chrysalidocarpus lutescens*, etiology 1269.
- Phage λ ,**
antiviral activity, quaternary ammonium compounds 1571.
mutagenesis, γ radiation induction 1580.
- Phage D-29,**
survival, continuous culture, use phage typing, *Mycobacterium smegmatis* 9010.
- Phage 12,**
inactivation, ammonia role, heat effects on 7945.
indicator species, ground water microbial pollution 8979.
- Phage MyF2 P/59,**
survival, continuous culture, use phage typing, *Mycobacterium smegmatis* 9010.
- Phage M13,**
purification methodology 3510.
- Phage typing,**
relationship, plasmids transfer, antibiotic resistance, *Staphylococcus aureus*
8721.
Rhizobium, Galega infection, taxonomic significance 8696.
Shigella sonnei phages 3519.
Staphylococcus aureus 893.
Staphylococcus aureus, food contamination, meat 2920.
use phage D-29, phage MyF2 P/59, continuous culture survival, *Mycobacterium*
smegmatis 9010.
- Phage T4,**
antiviral activity, quaternary ammonium compounds 1571.
deoxyribonucleic acid polymerase purification, characterization 7363.
polydeoxyribonucleotide synthetase (ATP), immobilized enzymes, DNA fragments
ligation 2755.
polyribonucleotide synthetase (ATP), use fluorescent probes, biotin labelling RNA
9833.
tRNA labelling, polyribonucleotide synthetase(ATP) use 9860.
- Phage 9X174,**
anthracycline antibiotics inactivation, association, DNA binding 1582.
disinfection, indicators, methodology 7964.
DNA biosynthesis inhibition, acalacinomycin A role 9775.
pentoses, inactivation 701.
- Phages,**
Brochothrix thermosphacta, isolation, beef, characterization 7568.
concentration, isolation, waste water, methodology 2654.
conjugation, *Escherichia coli* toxins gene transfer, toxicity, laboratory animals,
domestic animals 9315.
contamination, cheddar cheese starter cultures, milk 4804.
contamination, rivers, Yugoslavia 2620.
Cyanophyta, aerosols, wastewater treatment, indicator species 9796.
high-performance liquid chromatography, detection *Salmonella* 3579.
inactivation, antiviral activity, 7-N-(p-hydroxyphenyl)mitomycin C 1581.
inactivation, lysine derivatives, synthesis 1577.
isolation methodology, water, reviews 2649.
lactic acid bacteria, survival, cold storage 8103.
lysozyme induction, *Bacillus thuringiensis* subsp. *thuringiensis*, culture
6314.
lysis bacteria, use, Inc plasmids classification 9879.
microbial pollution, recreation sites, swimming 8970.
monitoring, use, characterization, *Ensifer adhaerens*, predatory behavior, soil
5090.
phages diameter, measuring techniques 832.
Serratia marcescens, monitoring, sewage treatment 3462.
Shigella sonnei, phage typing 3519.
starter cultures, meat, *Lactobacillus plantarum*, isolation, characterization
6676.
Streptococcus, viability, whey 4806.
tracers, ground water microbial pollution 3479.
- Phagocytosis,**
fungi, take-all, *Triticum aestivum*, soil microorganisms, amoeba 4223.
Gaeumannomyces graminis var. *tritici*, *Phytophthora cinnamomi*, *Cochliobolus*
sativus, role, *Leptomyxid*, soil 563.
- Phagolysosomes,**
pH intracellular levels, phagocytosis, *Staphylococcus aureus*, bactericidal
activity, aminoglycoside antibiotics, rifampicin 9733.
- Phakopora pachyrrhiza,**
rust, disease resistance inheritance, genetic analysis, *Glycine* max 6858.
rust, *Glycine* max leaves, microscopy analysis 8543.
- Phalaris aquatica,**
decomposition, soil microorganisms, phosphorus macromolecules levels 573.
- Phalloidin,**
isolation, physicochemical properties, *Amanita phalloides* 9312.
- Phallotoxins,**
Amanita phalloides, resistance, mice, fibroblasts 8502.
- Phallotoxins,**
host range, rust, *Discospora* 4013.
- Phanerochaete chrysosporium,**
biodegradation, aromatic compounds, catechol 7544.
dissolved oxygen transfer, lignin biodegradation 5588.
dyes decolorization, association, lignin biodegradation 6646.
ethylene production, association, α -oxo- γ -methylthiobutyric acid 1517.
hydroxyl radicals role lignin biodegradation 2001.
lignin biodegradation 6644.
lignin, biodegradation, metabolism 3778.
lignin biodegradation, oxygen role 3763.
lignin biodegradation, products association 2902.
lignin, solubilization, depolymerization 5589.
lignocellulose biodegradation, oxygen role 7550.
nitrogen sources effects on cellulose biodegradation 3770.
nitrogen sources effects on lignin biodegradation 2880.

- Phanerochaete sacrata**, canker, disease resistance, rootstocks, *Malus* 2259.
- Pharmaceuticals**, antibacterial activity 8753.
- Bifidobacterium**, counting methods 175.
- coatings, use, polymers solutions, microorganisms growth association 5345.
- industrial wastes, soil microorganisms decomposition, land disposal, reviews 5984.
- Pharmacokinetics**, bactericidal activity, amikacin, gentamicin, tobramycin, in vitro 4386.
- colibactin, antibacterial activity 5243.
- gentamicin, bactericidal activity, *Escherichia coli*, in vitro 4387.
- relationship antibiotic sensitivity testing, clinical microbiology 4329.
- trimethoprim, antibacterial activity, sulfonamides synergism 4289.
- Pharyngitis**, *Streptococcus*, man, diagnosis, nitrous acid extraction+agglutination 9905.
- Pulse variations**, yeasts fermentation, analysis, spectrometry 5433.
- Phaseolus**, plant breeding, disease resistance, white mold, *Sclerotinia sclerotiorum* 1365.
- Sclerotinia sclerotiorum* white mold, USA 4940.
- Phaseolus angularis**, Japan, *Phialophora gregata* isolates, pathogenicity 4932.
- Phaseolus aureus**, mung bean mild mosaic virus pathogenicity, *Rhizobium* inoculation, nitrogen fertilizers effects on 8534.
- plant breeding, disease resistance, mungbean yellow mosaic virus 446.
- Phaseolus coccineus**, nodulation, specificity, *Rhizobium phaseoli* 598.
- Phaseolus mungo**, seeds, germination, fungi effects on 3924.
- Phaseolus vulgaris**, Aphanomyces euteiches f.sp.phaseoli virulence, comparison *Pythium ultimum* 347.
- assays, lesions, pathogenicity, infection, bean common mosaic virus, soybean mosaic virus 8542.
- bacteria blight, disease control 9462.
- bean common mosaic virus infection, epidemiology, USA 5690.
- bean common mosaic virus, plant diseases, pathology 2956.
- biological control, *Agrobacterium radiobacter*, crown gall, *Agrobacterium tumefaciens* 2638.
- black line, association, cherry leaf roll virus, cytopathology 339.
- blight, pathogenicity, *Rhizoctonia solani* isolates 1134.
- blight, *Xanthomonas campestris*, comparison *Vigna unguiculata*, pathogenesis 340.
- chlorosis induction, *Pseudomonas phaseolicola* phytotoxins 2989.
- Colletotrichum lindemuthianum anthracnose epidemiology, Canada 4933.
- crop rotation, *Vigna unguiculata*, Zea mays, nodulation, growth 1504.
- cucumber mosaic virus disease transmission, *Aphididae* 7654.
- defense mechanisms, phytoalexins, antibacterial activity, *Xanthomonas campestris* pv.phaseoli 1383.
- defense mechanisms, phytoalexins induction, infection, *Uromyces phaseoli* 1352.
- disease resistance, *Colletotrichum lindemuthianum* 4068.
- disease resistance, proteins, tobacco mosaic virus 8608.
- disease resistance, *Pseudomonas vulgaris* blight, bean common mosaic virus mosaic disease, *Colletotrichum lindemuthianum* anthracnose 5815.
- disease resistance, tobacco mosaic virus, callus deposition, role boron 1377.
- disease resistance, *Xanthomonas campestris* pv.phaseoli blight, tropical environments 5052.
- hypersensitive response, leaves proteins, infection, *Colletotrichum lindemuthianum*, alfalfa mosaic virus, peanut stunt virus 1333.
- infection, southern bean mosaic virus, characterization, variability 333.
- infection, tobacco mosaic virus, actinomycin D antiviral activity 6888.
- inheritance, blackeye cowpea mosaic virus, cowpea aphid-borne mosaic virus disease resistance 4088.
- isogenic isolates, *Colletotrichum lindemuthianum* disease resistance, genetic variance 6863.
- necrosis, *Pseudomonas syringae* pv.tomato, etiology 3065.
- nodulation, *Rhizobium phaseoli*, *Pseudomonas syringae* subsp.phaseolicola halo blight effects on 7652.
- nodulation, specificity, *Rhizobium phaseoli* 598.
- nucleus, nitrogen fixation, *Rhizobium phaseoli*, glutamine synthetase, nitrogenase 6985.
- pathogenicity, *Fusarium*, association kievitone hydratase biosynthesis 345.
- pathology, symptoms, mixed infection, bean yellow mosaic virus, cowpea severe mosaic virus, cowpea mosaic virus 2994.
- peanut stunt virus isolation, USA, Arkansas 1127.
- penetration structure, *Borys cinerea* conidia 9332.
- phytoalexins, disease resistance, anthracnose, *Colletotrichum lindemuthianum* 1360.
- plant diseases, surveys 7659.
- plant extracts, *Pseudomonas phaseolicola* cell agglutination, role, pathogenesis 8540.
- planting density effects on nitrogen fixation 6963.
- pod rot, *Borys cinerea* spores dispersal, incidence 5686.
- pod rot infection, pathogenicity, *Populus* isolates 316.
- Pythium blight*, disease control, metalaxyl 9493.
- Rhizobium phaseoli* inoculation, nitrogen fixation, land reclamation, mines 5108.
- root rot incidence, USA, Wisconsin, bioassays 3923.
- rust, developmental stages, association, susceptibility, *Vigna sinensis* rust 6742.
- rust, *Uromyces appendiculatus*, interspecific relationships, *Verticillium lecanii*, population dynamics 2108.
- rust, *Uromyces phaseoli*, biological control, *Bacillus subtilis* 9498.
- Sclerotinia sclerotiorum* ascospores infection, symptoms 9334.
- seed-borne diseases, *Xanthomonas campestris* pv.phaseoli, detection, immunofluorescence 5800.
- seeds, survival, *Rhizobium phaseoli*, soil inoculum effects on 3159.
- southern bean mosaic virus, Brazil 2098.
- southern bean mosaic virus, disease transmission, feeding, regurgitation, *Epilachna varivestis*, *Ceratomyces trifurcata* 6738.
- soybean mosaic virus disease resistance, inheritance 6855.
- symptoms, *Rhizobium phaseoli*, *Glomus fasciculatus*, nitrogen fixation, phosphorus uptake 1502.
- Thanatephorus cucumeris web blight, epidemiology, Costa Rica 9325.
- tissues, *Pseudomonas syringae* infection, syringacin W-1 biosynthesis, activity 2114.
- tobacco mosaic virus infection, antiviral activity, EDTA treatment 511.
- Phaseolus vulgaris**, (continued)
- tobacco necrosis virus infected, hypocotyls, light, effect on 2992.
- treatment, dinoseb, root rot, *Pythium ultimum* 1387.
- U.V. radiation effects on hypersensitive response, tobacco mosaic virus 3111.
- Uromyces appendiculatus* var.appendiculatus rust, chlorothalonil disease control 5451.
- Uromyces phaseoli* inoculation methodology 5685.
- web blight, *Rhizoctonia solani*, mulches disease control 5050.
- Xanthomonas phaseoli* pathogenicity, sulfur dioxide effects on 334.
- Phellinus**, heart rot, wood decay, oxygen, carbon dioxide effects on 5084.
- Phellinus noxius**, rot, *Hevea brasiliensis*, pathogenesis 5081.
- Phellinus pini**, association, rust, *Cronartium comptoniae*, pathology, *Pinus banksiana* 548.
- infection, trees, wind barriers, distribution 4175.
- Phellinus pini var.cancriformans**, decay, canker formation, *Abies concolor*, *Abies balsamea* 538.
- Phellinus pini var.pini**, decay, canker formation, *Abies concolor*, *Abies balsamea* 538.
- Phellinus robineae**, infection, trees, wind barriers, distribution 4175.
- Phellinus weirii**, infection, *Pseudotsuga menziesii*, treatment, fumigants 545.
- melanins, role wood decay 6933.
- root rot, disease spread, *Pseudotsuga menziesii* 5072.
- root rot, mortality, *Pseudotsuga*, *Abies*, forests 5075.
- root rot, *Pseudotsuga menziesii* 5858.
- Streptomyces* antagonism, forests 2298.
- Phenanthrene**, metabolism, microorganisms, replica plating, detection, enumeration 3577.
- Phenazonil**, powdery mildew control, *Rosa* 5044.
- Phenazine**, biosynthesis, *Brevibacterium iodinum* 7457.
- Streptomyces cinnamonensis*, biosynthesis 8034.
- p-Phenetidine**, biodegradation, aerobic conditions 8436.
- Phenmedipham**, biodegradation, mineralization, soil microorganisms, *Pseudomonas* 5926.
- mineralization, soil pH effects on 5928.
- Phenol**, biodegradation, anaerobic bacteria, waste disposal sites, British Isles 3799.
- biodegradation, bacteria, sewage sludge 8941.
- biodegradation, soil microorganisms, chemical pollution 8420.
- biodegradation, *Streptomyces setonii* 2896.
- methanogenesis, bacteria, contamination, aquifers 4450.
- Phenols**, conversion, *Pseudomonas putida*, structure effects on 2882.
- effects on, *Graphium penicillioide*, biosynthesis, pectate lyase, pectin lyase 5451.
- elimination bacteria contamination, *Vaccinia virus* samples 2657.
- Eucalyptus, effects on *Cryphonectria cubensis* conidia spore germination, mycelia growth, role, disease resistance, canker 5814.
- levels, *Lagenaria vulgaris*, fruit rot, *Botrydiodiplodia theobromae* 7718.
- levels, *Oryza sativa*, phytopathogenic fungi infection 6763.
- solubility proteins, plants leaves, electrophoresis, relationship, viruses infection 2982.
- structure-activity relationships, *Escherichia coli* antibacterial activity 8758.
- substituted, structure-activity relationships, antifungal activity, *Trichophyton rubrum*, *Epidermophyton floccosum* 3338.
- sugars, *Brassica juncea*, white rust resistance 5769.
- Phenothiazines**, +amphotericin B, antifungal activity, *Candida* 4391.
- Phenotype mixing**, Glycine max, disease resistance, *Phytophthora megasperma* f.sp.glycine, infection 1373.
- Phenotypes**, screening, disease resistance, rust, *Dactylis glomerata* 6856.
- Phenoxazone**, biosynthesis, *Brevibacterium iodinum* 7457.
- Phenoxyacetic acid**, derivatives, *Aspergillus niger* biodegradation 6649.
- Phenoxyethanol**, antibacterial activity 6040.
- N-Phenyl-N'-3-hydroxyphenylthiourea**, encephalomyocarditis virus infected ascites tumor cells, effects on RNA biosynthesis 9683.
- encephalomyocarditis virus infected ascites tumor cells, effects on protein biosynthesis 9684.
- Phenylacetic acid**, antibacterial activity 9660.
- production, gas chromatography, *Bacteroides melaninogenicus* subsp.intermedius 5482.
- Phenylacetylcarbinol**, production, yeasts 1974.
- Phenylalanine**, biodegradation, bacteria, catechol-2,3-dioxygenase 157.
- biodegradation, *Pseudomonas*, 4-chlorobenzoic acid media 7308.
- metabolism transfer, gramicidin S synthetase activity, *Bacillus brevis* gramicidin S deficient mutant 8207.
- Phenylalanine ammonio-lyase**, levels, *Oryza sativa* leaf blight 384.
- stimulation, *Plasmodium halstedii*, downy mildew, *Helianthus annuus* 9405.
- Phenylglyoxal**, chemical modification, glutamate synthase (NADPH), *Escherichia coli* 5488.
- 8-Lactamase inactivation, *Bacillus cereus* 948.
- 1-Phenylhepta-1,3,5-triyne**, accumulation, *Bidens pilosa* tissue culture, *Pythium aphanidermatum* culture 5754.
- Phenylheptatriyne**, antifungal activity, viruses 7097.
- 2-Phenylindoline**, derivatives, antibacterial activity 8764.
- Phenylmercuric acetate**, seed treatments, *Hordeum vulgare*, *Triticum aestivum*, effects on *Fusarium nivale*

- Phenylmercuric acetate**, (continued)
infection 8645.
- Phenylobacterium immobile**,
ochratoxin A biodegradation 6656.
- Phenylureas**,
gram-negative bacteria biodegradation 2898.
- Phenylphenoxycetyl-CoA-ligase**,
Penicillium chrysogenum, purification, kinetics, penicillin biosynthesis 2780.
- Phialophora gregata**,
isolates pathogenicity, Phaseolus angularis, Japan, Glycine max, USA 4932.
stem rot, disease resistance, plant breeding, Glycine max cultivars 5040.
stem rot, disease resistance, plant breeding, Glycine max 9457.
- Philaenus spumarius**,
vectors, mycoplasma-like organisms, stunt, Rubus 3057.
- Phillipines**,
cadang-cadang, incidence, Cocos nucifera 1208.
deep water Oryza sativa, Cyanophyta association, nitrogen fixation 2358.
- Philodendron seloum**,
leaf blight, Erwinia chrysanthemi, nitrogen sources effects on 1298.
- Phloem**,
sap, collection, characterization, mycoplasma-like organisms yellows, Cocos nucifera 388.
sap, composition, mycoplasma-like organisms yellows, Cocos nucifera 387.
Sonchus oleraceus, beet yellow stunt virus detection, pathogenesis 4036.
- Phyloctenium**,
parasitism, Gigaspora margarita, Glomus fasciculatus, fungicides, effects on 5200.
- Phoenix canariensis**,
Graphiola phoenicis infection, ultrastructure, taxonomy 4008
- Pholiota mutabilis**,
laccase, purification, characterization 6407.
- Phoma**,
fungal flora, Fagus grandifolia bark 1438.
invasion, Trifolium repens 5692.
- Phoma arachidicola**,
blotch, interspecific relationships, Cercospora arachidicola leafspot, yield, Arachis hypogaea 2998.
leafspot, disease control, fungicides, Arachis hypogaea 9485.
- Phoma asparagi**,
infection, Asparagus officinalis 7700.
- Phoma betae**,
infection, Beta vulgaris, roots, symptoms 3996
- Phoma chrysanthemicola**,
infection, vegetables, plants, disease control 2267.
invasion, Trifolium repens 5692.
- Phoma costaricensis**,
dieback, seedlings, Coffea 7682.
- Phoma exigua**,
infection, Vigna radiata, biodeterioration, seed-borne diseases 3915.
pectin lyase, pectate lyase production, role seed rot, Vigna radiata 7413.
post-harvest decay, storage, Carica fruits 7719.
proteinase production 3670.
- Phoma exigua var. forestata**,
gangrene, epidemiology, Solanum tuberosum 6827.
- Phoma exigua var. foveata**,
disease resistance, Solanum tuberosum 5810.
gangrene pathogenesis, Solanum tuberosum 9446.
infection, isoprenoids isolation, tubers, Solanum tuberosum 3974.
infection, Lycopersicon esculentum stems, detection 4031.
- Phoma glomerata**,
antifungal activity, triadimenol diastereoisomers 693.
- Phoma lingam**,
disease resistance, haploidy, heredity, Brassica napus 450.
stem rot, disease control, agricultural practices, Brassica napus 495.
- Phoma medicaginis var. medicaginis**,
black stem, Medicago sativa, USA, Wyoming 9330.
- Phoma medicaginis var. pinodella**,
black rot, disease resistance, Pisum sativum, screening 7753.
infection, Pisum sativum subsp. arvense, disease resistance, screening 478.
leafspot, Ailanthus excelsa, India 2221.
seed-borne diseases, Pisum sativum, detection 6732.
- Phoma tracheiphila**,
mal secco disease, fungicides disease control, citrus 4101.
- Phoma wasiae**,
flaviola biosynthesis 1823.
- Phomopsis**,
antagonism association Cercospora kikuchi, in vitro 4939.
dieback, Pinus eliotti, Pinus taeda 5076.
herbicides stimulation fruits, Glycine max 5821.
host plants, Amaranthus spinosus, Leonotis nepetalefolia, leonorus sibiricus, new records, Brazil 6826.
infection, Glycine max seeds, relationship, weather, USA, Kentucky 6734.
invasion, Trifolium repens 5692.
stem canker, Glycine max, virulence 3925.
- Phomopsis aineae**,
stem canker, Ainus glutinosa 5888.
- Phomopsis citri**,
Mangifera indica, drug resistance, fungicides 1532.
pectinolytic enzymes 5528.
post-harvest decay, grapefruits, fungicides disease control, USA, Texas 4049.
- Phomopsis elaeagni**,
canker, Elaeagnus angustifolia, incidence, USA, Michigan 9522.
- Phomopsis leptostromiformis**,
infection, Lupinus angustifolius, seeds, detection, methodology 1811.
infection, Lupinus, relationship, grazing animals lupinus 5005.
phomopsis radioactive labelling 3869.
- Phomopsis mali**,
fruit rot, pathology, Malus pumila, Prunus persica 2145.
- Phomopsis oblonga**,
Dutch elm disease, Ulmus glabra, Scolytus vectors 1453.
- Phomopsis sojae**,
Diaporthe phaseolorum var. sojae infection, new records, Hungary 7657.
disease control, benomyl foliar applications, metham fumigation, Glycine max 5060.
- Phomopsis vaccinii**,
blight, pathology, Vaccinium corymbosum 1271.
- Phomopsis vaccinii**, (continued)
fruit rot, Vaccinium corymbosum, USA, North Carolina 3980.
- Phony disease**,
Prunus persica, bacteria detection, enzyme-linked immunosorbent assay 7694.
- Phony persica**, Rickettsia-like organisms isolation, culture, pathogenicity 6787.
- N-Phosphonomethyl glycine**,
effects on Glycine max phytoalexins accumulation association Pseudomonas syringae 498
- Phoric acid**,
effects on Rhizobium nodulation, Vigna sinensis 4251.
- Phosethyl aluminum**,
antibacterial activity 8633.
- Phosethylal**,
use, ornamental plants disease control 5056.
- Phosfolen**,
biodegradation, Rhizoctonia solani, Penicillium chrysogenum, Trichoderma viride 5586
- Phospholipase A₂**,
levels, Trichophyton rubrum resistant mutant, undecanoic acid drug resistance 7877.
- Phosphatase**,
activity, soil microorganisms, soil physicochemical properties effects on 5089.
pesticides (organophosphorus) hydrolysis, purification, Alcaligenes 2773.
soil microorganisms, kinetics 2343.
turmycon, fermentation, regulation 8037.
- Phosphate**,
batch culture, Escherichia coli 878.
binding sites, adenosinetriphosphatase β -subunit, 4-azido-2-nitrophenylphosphate photoaffinity labelling, Escherichia coli 4687.
biomass, soil microorganisms, measuring techniques 567.
buffers, blood chloride, sodium chloride, Legionella pneumophila 851.
fertilizers, association, Glomus fasciculatus vesicular-arbuscular mycorrhizas inoculation, effect on Capsicum annum, growth yield 4227.
fertilizers, uptake, Glomus fasciculatus, growth, Lolium rigidum, Trifolium subterraneum 9547.
inhibition 4-hydroxybenzoate 3-monooxygenase, Pseudomonas fluorescens 8275.
Lactuca sativa, effects on Glomus mosseae symbiosis 5903.
soil, Rhizobium, vesicular-arbuscular mycorrhizas, yield, Medicago sativa 7850.
media, association, Bacillus megaterium spores, heat resistance, chemicals resistance 3280.
mycorrhizas, absorption, nutrient transport, Ericales 9538.
release, streptomycin, fermentation, Streptomyces gneuseus 8003.
release, turmycon, fermentation, regulation 8038.
requirements, turmycon production, Streptomyces hygroscopicus 3439.
solubilization, carbon sources, fungi, soil 9533.
solubilization, organic acids, phosphate-dissolving bacteria, Aspergillus, Penicillium, soil 3187.
solubilization, phosphate-dissolving bacteria, Aspergillus niger, uptake, Oryza sativa 3188.
solubilization, Streptomyces, Aspergillus niger, soil 3214.
Streptomyces gneuseus, effects on streptomycin biosynthesis 7151.
uptake, mycorrhizas, roots, Trifolium subterraneum 559.
uptake, vesicular-arbuscular mycorrhizas, Allium cepa, Capsicum 6948.
- Phosphate-binding protein**,
biosynthesis, relationship phos gene, Escherichia coli 4553.
- Phosphate-dissolving bacteria**,
acid production, aluminum phosphate solubilization 5891.
growth, inhibition, 2,4-D, 2,4-dichlorophenoxy-1,2-nitrophenyl ether, 5-methyl(2,4-dichlorophenoxy)-2-nitrobenzoate, rhizosphere, Triticum aestivum 4252.
inoculation effects on yield, Vicia faba 5892.
phosphate solubilization, organic acids, soil 3187.
phosphate solubilization, soil 3214.
phosphate solubilization, uptake, Oryza sativa 3188.
rhizosphere, Gramineae, Leguminosae 2333.
- Phosphates**,
buffers, hydrogen peroxide formation, electric currents, cytotoxicity, Escherichia coli 2451.
inorganic compounds, assays methodology, bacteria 4498.
nutrient deficiencies, batch culture, Streptomyces gneuseus streptomycin production 4383.
solubilization, microorganisms, relationship, soil phosphates content 4195.
- Phosphatidyl choline**,
degradation, mineralization, soil microorganisms, enzymatic activity, nutrient sources, plants 5915.
- Phosphatidylinositol**,
specificity, phospholipase C, purification, characterization, Staphylococcus aureus 8236.
- Phosphatidylserine decarboxylase**,
purification, characterization, Escherichia coli 8232.
- Phosphatidylserine synthase**,
Clostridium perfringens, purification, characterization 5485.
purification, characterization, Escherichia coli 8231.
- Phosphatidyl[2-³H]inositol**,
Saccharomyces cerevisiae, production 979.
- Phosphoric acid**,
derivatives roles, bialaphos biosynthesis, Streptomyces hygroscopicus mutants 4570.
- Phospho-N-acetylmutaromyl-pentapeptide-transferase**,
role, peptidoglycans biosynthesis, amphotycin, inhibition, Bacillus megaterium 551.
- 6-Phospho-2-keto-3-deoxy-galactonate aldolase**,
purification, Pseudomonas saccharophila 6434.
- Phospho-2-keto-3-deoxy-gluconate aldolase**,
purification, Pseudomonas saccharophila 6434.
structure, X-ray crystallography, Pseudomonas putida 2791.
- 6-Phospho-3-ketohexulose isomerase**,
purification, characterization, Methylococcus capsulatus 4654.
- Phosphocarrier protein**,
purification, characterization, phosphoenolpyruvate-glucose phosphotransferase, Salmonella typhimurium 6416.
subunit structure, active sites, Staphylococcus aureus 4.
- Phosphoenolpyruvate**,
binding pyruvate kinase, Neurospora crassa 1931.

- Phosphoenolpyruvate carboxylase**, purification, *Escherichia coli* 965.
- Phosphoenolpyruvate-fructose phosphotransferase**, stereochemistry, mechanisms, *Escherichia coli* 92.
- Phosphoenolpyruvate-glucose phosphotransferase**, enzyme I, purification, characterization, *Salmonella typhimurium* 6415.
- enzyme II-B (Glc), purification, assays, *Salmonella typhimurium* 6413.
- enzyme III (Glc), purification, characterization, *Salmonella typhimurium* 6417.
- phosphocarrier protein, purification, characterization, *Salmonella typhimurium* 6416.
- role glucose transport, bacteria 6411.
- Phosphoenolpyruvate-protein phosphotransferase**, enzyme I phosphorylation, protons transfer stereospecificity, *Escherichia coli* 7398.
- Phosphofructokinase**, subunits, amino acid analysis, peptide mapping, *Saccharomyces cerevisiae* 941.
- 6-Phosphogluconate kinase**, AMP affinity, fructose 2,6-diphosphate stimulation, yeasts 2782.
- characterization, *Clostridium pasteurianum* 6442.
- isoenzymes, purification, characterization, *Escherichia coli* 6433.
- purification, *Bacillus subtilis* 949.
- purification, characterization, *Streptococcus lactis* 6440.
- purification, characterization, yeasts 6432.
- purification, kinetics, *Aspergillus niger* 4610.
- purification, *Saccharomyces cerevisiae* 1875.
- purification, stabilization, *Bacillus licheniformis* 6435.
- stimulation, *Phycomyces blakesleeanus*, fructose 2,6-bisphosphate role 9130.
- Phosphogluconate dehydrogenase (decarboxylating)**, purification, characterization, *Bacillus stearothermophilus* 4638.
- purification, characterization, *Pseudomonas fluorescens* 4592.
- Phosphoglycerate kinase**, amino acid sequence, yeasts 6458.
- purification, characterization, *Bacillus stearothermophilus* 6418.
- Saccharomyces cerevisiae*, amino acid sequence, crystal structure 2775.
- structure, ATP, 3-phosphoglyceric acid binding effects on, X-ray scattering, yeasts 7356.
- yeasts, purification, characterization 6446.
- yeasts, purification, characterization 6447.
- 3-Phosphoglyceric acid**, binding phosphoglycerate kinase, effects on structure, X-ray scattering, yeasts 7356.
- Phospholipase**, bacteria outer membranes, role, drugs antibacterial activity 8783.
- Candida albicans*, extracellular enzymes, assays, Petri dishes 7327.
- Erysiphe pisi*, purification, activity 6541.
- Phospholipase A₂**, *Brassica juncea*, effects on pathogenesis, *Macrophomina phaseolina* infection 4005.
- Phospholipase C**, *Bacillus cereus* 8237.
- phosphatidylinositol specificity, *Bacillus cereus*, *Bacillus thuringiensis* 8235.
- phosphatidylinositol specificity, purification, characterization, *Staphylococcus aureus* 8236.
- purification, characterization, *Bacillus thuringiensis* 8242.
- purification, characterization, *Clostridium perfringens* 8239.
- Phospholipase D**, *Streptomyces cinnamonensis*, chromatography 28.
- Phospholipid composition**, *Staphylococcus aureus*, methicillin antibiotic resistance 9648.
- Phospholipids**, activation glucose dehydrogenase, cytoplasmic membranes, *Pseudomonas fluorescens* 955.
- assays, high-performance liquid chromatography, methanogenic bacteria, environments 5362.
- biodegradation, microorganisms 2881.
- content, *Staphylococcus aureus* cell walls, antibiotics effects on 3380.
- fatty acid composition, *Nicotiana tabacum*, hypersensitive response, tobacco mosaic virus 7741.
- metabolism, *Trichophyton rubrum*, antifungal activity, undecanoic acid 7931.
- + proteins complex use, *Zymomonas mobilis* ethanol biosynthesis, fermentation 144.
- vesicles, glycerophosphate acyltransferase, reconstitution, kinetics, N.M.R. 3703.
- Phosphonates**, soil, New Zealand, relationship, bacteria 1469.
- Phosphonic acid antibiotics**, biosynthesis, antibacterial activity, *Streptomyces* 6188.
- Phosphonic acid**, varicella-zoster virus, cross-resistant, 9-(2-hydroxyethoxymethyl)guanine, bromodeoxyuridine 7897.
- Phosphonoformate**, synergism, antiviral agents, antiviral activity, herpes simplex virus 1, herpes simplex virus 2 1572.
- Phosphonofornic acid**, antiviral activity, susceptibility, herpes simplex virus 6078.
- drug sensitivity testing assays, herpes simplex virus 1, herpes simplex virus 2 6075.
- esters, production, antiviral activity, herpes simplex virus 1 5209.
- N-(Phosphonomethyl) glycine**, effects on, soil microorganisms, respiration, populations 620.
- effects on nitrogen cycle, soil, Finland 5972.
- N-(Phosphonomethyl)glycine**, 3-enolpyruvoylshikimate-5-phosphate synthase inhibition, *Neurospora crassa* 4668.
- Phosphorescence**, lacase, *Polyporus versicolor* 7366.
- Phosphoribosyl-anthranilate isomerase**, + indole-3-glycerol-phosphate synthase, X-ray crystallography, *Escherichia coli* 960.
- Phosphorites**, uranium leaching, heterotrophic microorganisms 3255.
- Phosphorous tungstic acid**, + ammonium molybdate, preservation viruses antigenic characteristics, storage 7226.
- Phosphorus**, *Allium cepa*, uptake, *Glomus etunicatus* stimulation 4200.
- bioassays, Enterobacter xanthine oxidase 5413.
- + carbon bonds, *Streptomyces hygroscopicus* bialaphos biosynthesis 2824.
- Phosphorus, (continued)** containing cations complex, antibacterial activity 7921.
- effects on *Oryza sativa*, susceptibility, leaf blight, *Xanthomonas campestris* pv. *oryzae* 6750.
- effects on vesicular-arbuscular mycorrhizas spreading, roots, mathematical models 2329.
- fertilizer applications, effects on, nitrogen fixation, *Leguminosae* 517.
- fertilizer applications, effects on nodulation, nitrogen fixation, *Inga jinicuil* 7843.
- fertilizers content, effects on *Phytophthora nicotianae* var. *parasitica* buckeye rot, *Lycopersicon esculentum* 9445.
- fertilizers effects on nutrient uptake, role, vesicular-arbuscular mycorrhizas, *Medicago sativa*+*Rhizobium meliloti* nodulation 6943.
- levels, granules, *Mycorrhizas*, *Fagus* 6973.
- macromolecules, levels, *Phalaris aquatica* decomposition, soil microorganisms 573.
- mineralization, oil shales, *Pseudomonas*, *Rhizobitis* 556.
- mineralization, soil properties, forests, measuring techniques 521.
- nutrient availability, effects on endomycorrhizas, colonization, phosphorus, *Malus pumila*, *Allium porrum*, *Tagetes patulus* 9543.
- nutrient availability, roots uptake, nutrient availability, carbohydrates levels, roots, *Trifolium subterraneum* 9576.
- nutrient sources, mycorrhizas, seedlings, *Telephora terrestris*, *Picea sitchensis* 1441.
- nutrient sources, phosphatidyl choline, degradation, mineralization, soil microorganisms, enzymatic activity 5915.
- nutrient sources, rhizosphere microorganisms, plant communities, nival zone 4213.
- nutrient status, mycorrhizas, *Glomus fasciculatum*, *Bouteloua gracilis* 1485.
- nutrient status, mycorrhizas, seasonal variations, *Gomphelia* 1490.
- nutrient uptake, *Allium cepa*, role, endomycorrhizas, association, soil salinity 7804.
- nutrient uptake, nutrient availability, endomycorrhizas, *Malus pumila*, *Allium porrum*, *Tagetes patulus* 9544.
- removal, mixed culture, *Scenedesmus*, *oscillatoria*, bacteria 2615.
- soil microorganisms, biomass, measuring techniques 572.
- soil pH, effects on growth, nodulation, *Alnus glutinosa* 555.
- supplementation, single-cell protein, yeasts, feeding trials, chickens 9285.
- treatment, industries waste water, nitrogen removal 5319.
- treatment, vesicular-arbuscular mycorrhizas inoculation, *Manihot esculenta* response 4221.
- uptake, *Glomus fasciculatum*, symbiosis *Rhizobium phaseoli*, nitrogen fixation, *Phaseolus vulgaris* 1502.
- uptake, *Sophora secundiflora*, mycorrhizas effects on 583.
- Phosphorylase kinase**, isolation, characterization, *Saccharomyces cerevisiae* 7359.
- Phosphorylation**, adenosine, ratio, soil microorganisms 4220.
- carbohydrate composition, correlation β -D-fructofuranosidase polymorphism, isoelectric focusing, *Saccharomyces cerevisiae* 65.
- phosphoenolpyruvate-protein phosphotransferase enzyme I, protons transfer regulation specificity, *Escherichia coli* 7398.
- regulation RNA polymerase I, RNA polymerase II activity, *Saccharomyces cerevisiae* 4599.
- 3-Phosphoalkimate 1-carboxyvinyltransferase**, purification, characterization, *Escherichia coli* 7386.
- Photinus luciferin 4-monooxygenase (ATP-hydrolysing)**, bioluminescence, use, measuring techniques, sewage sludge ATP levels 7194.
- Photo-CDMP**, endonuclease calcium deoxynucleotides inhibitors complex conformation, *Staphylococcus aureus* 7395.
- Photoactivation**, media (culture), magnesium chloride+riboflavin+aromatic compounds, bactericidal activity, *Salmonella typhimurium* 8781.
- Photoeffinity labelling**, adenosinetriphosphatase β -subunit phosphate binding sites, *Escherichia coli* 4687.
- β -D-galactosidase, *Escherichia coli* 7421.
- glutathione reductase (NAD(P)H), yeasts 6500.
- luciferin 2-monooxygenase subunits binding 1-diazo-2-oxoundecane, *Vibrio harveyi* 2600.
- nanrolone, $\Delta 6$ -testosterone, $\Delta 5$ -3-ketosteroid isomerase, *Pseudomonas testosteroni* 5489.
- use, toxoids preparation, *Pseudomonas aeruginosa* exotoxin A 8050.
- Photobacterium leignathi**, culture, luminescence use control 891.
- Photochemistry**, atmosphere nitrogen, environmental impact 604.
- Photography**, methodology, detection, *Trichoderma harzianum*, parasitism, *Rhizoctonia solani* 8159.
- Photoinactivation**, catechol oxidase, *Agaricus bisporus* 9178.
- Photometry**, dental plaque formation, *Streptococcus mutans*, in vitro 9025.
- Photooxidation**, histidine residues, endo-1,3(4)- β -D-glucanase, effects on activity, *Flavobacterium dormitorum* 6477.
- Photoperiod**, citrus dimensia, effects on vesicular-arbuscular mycorrhizas 4209.
- effects on, pathogenesis, leaf rust, *Melampsora medusae*, *populus* 6930.
- Photosynthesis**, carbon sources, competition, *Claviceps purpurea* sclerotia, infection, *Secale cereale* seeds 374.
- carbon sources effects on nitrogen fixation, *Rhizobium meliloti*, *Medicago sativa* 9578.
- Glycine max, energy budget, carbon sources, utilization, nitrogen fixation, *Rhizobium* 9603.
- inhibitors effects on *Puocinia graminis* f.sp. *tritici*, stem rust, *Triticum aestivum* 3948.
- relationship nitrogen fixation, *Glycine max* 6984.
- Rhizobium japonicum* symbiosis, *Glycine max* 8701.
- starch biosynthesis, algae, symbiosis, bacteria 3708.
- translocation, powdery mildew effects on, *Hordeum vulgare* 3931.
- Vicia faba*, carbon sources, utilization, mycorrhizas, *Rhizobium*, nodulation, nitrogen fixation 615.
- Phototrophic bacteria**, cell size, cell volume, measuring techniques 5388.

Phototrophic bacteria, (continued)

fermenters, culture 3555.
population dynamics, waste treatment, animal wastes, lagoons 4434
Rhodospirillum rubrum, hydrogen production 125
thiophene-2-carboxylate metabolism 152

Phragmidium mucronatum,

Rosa laxa rust, fungicides disease control 4115.
rust, Rosa laxa, pathology 4045.

Phragmidium violaceum,

rust, Rubus fruticosus, host-pathogen interactions analysis methodology 9440.

Phycosphaera blakesleeana,

ATP, ADP, AMP inhibition lactate dehydrogenase 1905.
6-phosphofructokinase stimulation, fructose 2,6-bisphosphate role 9130.

Phyllanthus emblica,

root rot, Rhizoctonia solani, growth conditions 6915.

Phyllis flagi,

outbreaks, association fungi infection, Fagus 3166.

Phylloidy,

Mycoplasma-like organisms, disease transmission, Deltocephalus flavicosta, Catharanthus roseus 7694.

Phylloplane,

plant diseases, biological control, reviews 3147.

Phytophthora microorganisma,

fungal flora, needlecast, Pinus sylvestris 9521.
population dynamics, Rosa, Diplocarpon rosae infection effects on 2200.

Phytophthora,

distribution, Actinomyces, yeasts, growth stage, Vicia faba, Glycine max, effects on 6946.
distribution, nitrogen-fixing bacteria, Glycine max, Vicia faba, factors affecting 5957.
nitrogen-fixing bacteria, nitrogen fixation 9590.

Phytophthora microorganisma,

Vicia faba, gibberellic acid effects on 9601.

Phylosticta vaccinii,

pathogenicity, fruit rot, post-harvest decay, Vaccinium macrocarpon 9418

Phymatopteris omnivora,

geographical distribution, limiting factors, soil characteristics, environmental requirements 9557.

Phytophthora,

mycelia, sclerotia, antifungal activity, ammonia 696.

Phytophthora,

root rot, Cichorium intybus 5006.

wilt, effects on, Gossypium hirsutum, roots, water flow 4039.

Phytophthora,

lesions, methodology, use, detection, potato virus A mixed infection 2157.

pepper veinlet mottle virus infection, symptoms, Ivory Coast 1235.

Phytophthora curassavica,

plant diseases, viruses, susceptibility 3083.

Phytophthora flavicomum,

lysosomes proteinase, purification, characterization 9144.

Phytophthora polycephalum,

β -N-acetyl-D-glucosaminidase, isolation, characterization 3673.

chemotaxis, antimicrobial agents effects on 4306.

lysates, mRNA isolation methodology 7268.

ornithine decarboxylase inhibitor, purification, activity, polyamines stimulator 81.

proteinase kinase, purification, characterization 1903.

protein kinase, physicochemical properties, kinetics 6460.

Phytophthora magnusoni,

varicolaric acid biosynthesis 3649.

Physicochemical properties,

allomorphin, Aspergillus niger 766.

amine dehydrogenase, Thiobacillus, Methylophilus methylotrophus 64.

amphotericin B, antibacterial activity 1634.

carotenem, derivatives, isolation, Streptomyces, production 1649.

carvianus, infection, Solanum melongena 408.

DNA, Escherichia coli, association, dNAC B1 bactericidal activity 775.

levorin, inactivation mechanisms 770.

oliviano acid, derivatives, isolation, Streptomyces olivaceus 1663.

potato aucuba mosaic virus, isolation, Cyphomandra betacea infection 393.

Pseudomonas fluorescens extracellular proteinase 95.

pyrolytin, production, Myxococcus fulvus 1653.

saphenaycin, biosynthesis, Streptomyces canarius 1658.

teichoicase, Bacillus subtilis 957.

viruses, isolation, reservoirs, biochemical analysis 795.

Physiological disorders,

tissues, Trifolium vesiculosum, association, fungi 8544.

Physiology,

brewing yeasts, characterization methodology, ethanol fermentation 1049.

Physoderma maydis,

brown spot, disease control, tillage, Zea mays 7736.

Physopella zea,

infection, Zea mays, pathogenesis, morphology 2130.

pathogenesis, morphogenesis, association, Zea mays 383.

3-Phytase,

Bacillus subtilis, purification, characterization 30.

Phytoalexins,

L-2-aminoxy-3-phenylpropionic acid, inhibition, Glycine max, effects on, disease resistance, Phytophthora megasperma f.sp.glyciniae 3907.

antibacterial activity, Xanthomonas campestris pv.phaseoli, defense mechanisms, Phaseolus vulgaris 1383.

antifungal activity, Botrytis cinerea, Cladosporium herbarum 2283.

Avena sativa, disease resistance, crown rust, Puccinia coronata f.sp.avenae 1353.

biochemistry, energetics, bacteria, fungi, disease resistance, plant breeding 4059.

biochemistry enzymatic activity, Petroselinum hortense cell culture, fungi infection 5767.

Daucus carota roots, antimicrobial activity, bacteria, fungi 5057.

formation, Beta vulgaris, Rhizoctonia adoheldii infection 2260.

Glycine max, accumulation, association Pseudomonas syringae, N-phosphonomethylglycine effects on 498.

Gossypium hirsutum, antibacterial activity, Xanthomonas campestris 460.

Helminthosporium carbonum infected Medicago rugosa leaves, isolation, characterization 1355.

inducers, use, Oryza sativa seed treatments, induction, hypersensitive response, disease resistance, Drechslera oryzae infection 2292.

induction, Petroselinum hortense cell culture, fungi infection 5765.

induction, Solanum tuberosum tubers, infection, arachidonic acid, Phytophthora

Phytoalexins, (continued)

infestans 428.

maackiain, Sclerotinia trifoliorum biodegradation 2000.

Medicago sativa, leaves, interaction, Verticillium albo-atrum 2999.

medicarpin, maackiain, Cicer anethum, Fusarium solani metabolism 3779.

+metaxyl, Glycine max root rot treatment, Phytophthora megasperma f.sp.glyciniae 503.

neurotoxins, Lolium perenne, response fungi infection 3955.

Oryza sativa, host-parasite interactions, Pyricularia oryzae, isolation, identification 6849.

Phaseolus vulgaris, disease resistance, anthracnose, Colletotrichum indennitum 1360.

Phaseolus vulgaris, induction, defense mechanisms, infection, Uromyces phaseoli 1352.

production, Lathyrus sativus, association, Botrytis cinerea infection 6846.

role, Glomerella cingulata, latent infection, Capsicum annuum 4070.

Phytol,

biodegradation, aquatic bacteria 5595.

Phytolacca americana,

glycoproteins, antiviral activity, tobacco mosaic virus 2491.

proteins antiviral activity, relationship disease resistance, reviews 9478.

proteins, chemical modification, effects on antiviral activity 1576.

proteins, inhibition herpes simplex virus DNA biosynthesis 3368.

Phytopathogenic fungi,

cryopreservation, viability, pathogenicity, methodology 4544.

disease resistance, soil-borne diseases, genetic analysis, crop plants 6852.

fungicides resistance, plant diseases 8725.

infection, Avena, Gaumannomyces graminis suppression, soil, effects on 3205.

infection, Gramineae, Gaumannomyces graminis suppression, soil, effects on 3207.

infection, Oryza sativa, lignin formation, phenols levels 6763.

leavespot, medicinal plants 7686.

Verticillium, survival, soil 7907.

Phytophthora megasperma,

morphology, pathogenicity, host range 3904.

Phytophthora,

antifungal activity, metaxylal 481.

antifungal activity, propamocarb, disease control, Lycopersicon esculentum 502.

black rot, Theobroma cacao, etiology 366.

dieback, disease control, Rhododendron, greenhouses 9419.

forests soil effects on, survivability, germination, infectivity, mycelia, chlamydospores 1483.

infection, Rhododendron, Azalea, Ilex crenata, incidence, greenhouses 1282.

pathogenicity, Coniferales 5073.

pathogenicity, Theobroma cacao seedlings 3966.

population structure, infection, Theobroma cacao, Hevea brasiliensis, Mangifera indica 4977.

root rot, Abies alba, pathology, incidence 4150.

root rot, disease control, trees, silviculture 2317.

root rot, disease tolerance, Glycine max, plant breeding, USA, Ohio 7656.

root rot, Vaccinium corymbosum, new records, USA, Arkansas 1263.

rot, Asparagus officinalis 9383.

Phytophthora cactorum,

antifungal activity, antibiotics, bacteria 8633.

canker, disease resistance, Malus pumila 1357.

collar rot, fumigants disease control, Malus pumila 492.

collar rot, Malus pumila, metaxylal effects on pathology 505.

fruit rot, Fragaria 3092.

incidence, orchards, Malus pumila, Prunus 386.

rot, effects on, Fragaria, yield 5755.

ultrastructure, quinoxene effects on 4124.

Phytophthora cambivora,

incidence, orchards, Malus pumila, Prunus 386.

Phytophthora capsici,

infection, Capsicum annuum, epidemiology 5792.

seeds, fungicides effects on, Capsicum annuum 5832.

Phytophthora cinnamomi,

chlamydospores formation, soil survival, infection, Lupinus angustifolius 5693.

dieback, disease control, plants soil mixtures 4925.

dieback, Eucalyptus marginata, disease transmission, pathogenesis 9523.

experimental infection, Chamaecyparis lawsoniana, disease resistance 472.

infection, Dryandra sessilis, pathogenesis 4153.

infection, Eucalyptus regnans, disease resistance, intraspecific relationships 8653.

infection, host range, callose, formation, plants 3901.

infection, Isopogon ceratophyllus, Eucalyptus macrophylla, Eucalyptus goniochaly, water relations 39.

infection, response, Zea mays, Callose formation 3020.

infection, roots respiration, seedlings, plants 5668.

infection, susceptibility, Banksia 8592.

infectivity, Rhododendron, soil pH effects on 3994.

Laportomyces lysis, phagocytosis, soil 563.

pathogenicity, Coniferales 5073.

root rot, calcium nitrate, ammonium sulfate, effects on, Persea indica 2147.

root rot, metaxylal disease control, Abies fraseri 5867.

root rot, Sciadopitys verticillata 5749.

root rot, seedlings, trees 1463.

root rot, soil temperature, inoculum, effects on, Abies fraseri 5872.

soil, distribution, bioassays, association plant diseases 539.

soil, media (selective), bioassays, Abies fraseri seedlings, Rhododendron obtusum leaves 324.

soils (podzolic), effects on, zoospores, pathogenesis, dieback, Banksia grandis 5850.

sporulation, Eucalyptus forests soil extracts effects on 525.

Phytophthora citrophthora,

brown rot, disease control, citrus, fungicides, applications, methodology, comparison 8638.

brown rot, post-harvest decay, disease control, metaxylal, fruits 1419.

Phytophthora cryptogea,

incidence, orchards, Malus pumila, Prunus 386.

pathogenicity, Coniferales 5073.

root rot, Cichorium intybus 5006.

sporulation, Eucalyptus forests soil extracts effects on 525.

Phytophthora drechsleri,

disease resistance, seedlings, Cucurbitaceae 1364.

wilt, Cucurbita, Cucumis 2210.

- hyphophora drechleri f.sp.cajani**,
disease resistance, plant breeding, Cajanus cajan 5036.
- hyphophora erythrosesica**
root rot, susceptibility, mixed infection, bean yellow mosaic virus, Trifolium 335.
- hyphophora fragariae**,
Fragaria vesca red core, disease control, agricultural practices association, dazomet, fenamisol 1415.
- infection, Fragaria vesca, epidemiology 3984.
- isolating, methodology 4533.
- hyphophora infestans**,
acyclalines resistance, New Zealand 7880.
- antifungal activity, metalaxyl, tubers accumulation, Solanum tuberosum 9495.
- antifungal activity, (2-pyridylthio)methyl benzoate N-oxides 5204.
- blight, effects on, Solanum tuberosum, yield 6822.
- root, epidemiology, Solanum tuberosum 621.
- blight, inoculum potential, epidemiology, Solanum tuberosum 424.
- blight, Solanum tuberosum, disease control, metalaxyl 9494.
- cell walls extracts, effects on membrane potential, Solanum tuberosum 3053.
- chemical control, metalaxyl, analogs, Solanum tuberosum 2288.
- disease resistance, Solanum tuberosum, hypersensitive response, role 3144.
- disease spread, Solanum tuberosum, field trials, mathematical models 8593.
- hypersensitive response, sesquiterpenoids, alkaloids, tubers, Solanum tuberosum 3089.
- hyphae, cell walls, components, response, Solanum tuberosum, protoplasts 3098.
- infection, arachidonic acid induction phytoalexins, tubers, Solanum tuberosum 426.
- infection, Lycopersicon esculentum, proteinase inhibitors purification 5772.
- infection, Lycopersicon esculentum, steryl esters, steryl glycosides content, relationship, susceptibility 3983.
- infection, Solanum tuberosum, leaves susceptibility 1228.
- infection, Solanum tuberosum, metalaxyl sensitivity 504.
- late blight, adaptability, disease resistance, Solanum tuberosum 8621.
- late blight, disease spread, Solanum tuberosum, mathematical models 9381.
- late blight, fungicides, applications, Solanum tuberosum 4106.
- late blight, fungicides resistance, measuring techniques, in vitro, Solanum tuberosum 7891.
- late blight, Lycopersicon esculentum 8572.
- late blight, pathogenesis, Lycopersicon esculentum, role, sterol composition, light intensity effects on 5785.
- late blight, prediction, use, disease resistance, weather, effects on, fungicides, Solanum tuberosum 8621.
- late blight, Solanum tuberosum, epidemics, Africa, East 420.
- late blight, Solanum tuberosum, epidemics, USA, Washington 1267.
- metalaxyl resistance, association Solanum tuberosum infection, Netherlands 6795.
- metalaxyl resistance, incidence, infectivity, Solanum tuberosum, Israel 6798.
- mycelia lipoglycoproteins, effects on Solanum tuberosum tubers ultrastructure 2257.
- sporulation, infection, nutritional status, Solanum tuberosum 6801.
- hyphophora megasperma**,
disease resistance, natural selection, Glycine max 330.
- disease resistance, metalaxyl 1529.
- infectivity, roots, Trifolium repens 350.
- pathogenicity, Coniferales 5073.
- root rot, susceptibility, mixed infection, bean yellow mosaic virus, Trifolium 335.
- hyphophora megasperma f.sp.glycineae**,
L-2-aminoxy-3-phenylpropionic acid, inhibition, phytoalexins, Glycine max, effects on, disease resistance 3907.
- disease control, seed treatments, metalaxyl, Dowco 444, Glycine max 8644.
- infection, Glycine max, disease resistance, glyphosate effects on glycolin biosynthesis 501.
- infection, Glycine max, disease resistance, host-pathogen interactions 8615.
- infection, Glycine max, disease resistance, phenotype mixing 1373.
- infection, Glycine max, epidemiology, Australia 4936.
- infection, Glycine max, hypocotyls, laccase 3916.
- infection, Glycine max, Rps6 gene, role, disease resistance 2252.
- infection, Petroselin hortense cell culture, phytoalexins induction 5765.
- infection susceptibility, Glycine max cultivars 6739.
- isolation methodology, association, Pythium contamination 589.
- races, infection, Glycine max 1145.
- races, root rot, Glycine max 5674.
- races, virulence, USA, Wisconsin 1130.
- root rot, Glycine max 1135.
- root rot, Glycine max, disease control, fungicides seed treatments, USA, Ohio 7772.
- root rot, Glycine max, treatment, metalaxyl+phytoalexins 503.
- root rot, Rhizobium japonicum nodulation effects on pathogenicity, Glycine max 5669.
- root rot, stalk rot, metalaxyl, Glycine max 1420.
- temperature effects on pathogenicity, Glycine max, Medicago sativa, Cicer arietinum 336.
- zoospores pathogenesis, roots, Glycine max 4935.
- hyphophora megasperma f.sp.medicaginis**,
rhizosphere dimensions, measurements methodology 9571.
- root rot, ecological distribution, disease resistance, Medicago sativa 3913.
- root rot, Medicago sativa, USA, Wyoming 3921.
- hyphophora megasperma var.sojae**,
disease resistance, Glycine max, agglutinins relationship 1371.
- infection, Glycine max, hydroponics, factors affecting, 349.
- root, Glycine max 3920.
- soil isolates, association Psophocarpus tetragonolobus 432.
- hyphophora megasperma**,
incidence, orchards, Malus pumila, Prunus 388.
- hyphophora nictotianae**,
infection, vegetables, plants, disease control 2267.
- hyphophora nictotianae var.parasitica**,
buckeye rot, Lycopersicon esculentum, fertilizers content, nitrogen, phosphorus, potassium, effects on 9445.
- root rot, fungicides disease control, seedlings, citrus lemon 484.
- hyphophora palmivora**,
canker, maneb, chlorothalonil disease control, Carica papaya 5058.
- canker, Theobroma cocoa, metalaxyl treatment, disease control 1417.
- centrifugation, preservation, methodology 6347.
- fungicides, antifungal activity, in vitro 5824.
- infection, orchards, prophylaxis, treatment, fungicides 5828.
- Phytophthora palmivora, (continued)**
root rot, Carica papaya, disease control 1213.
- Washingtonia buds rot 1256.
- Phytophthora parasitica**,
agglutination, glycoproteins, Nicotiana tabacum, callus culture 1351.
- black shank, disease resistance, Nicotiana, genetic analysis 1340.
- dieback, overwintering, temperature, effects on, Rhododendron 9389.
- dieback, sporangia, survival, pathology, Rhododendron 9386.
- root rot, disease control, metalaxyl, aluminum tris (-O-ethyl phosphonate, Citrus paradisa 5065.
- sex hormones, production, isolation, characterization 6566.
- var. nictotianae, infection, Nicotiana tabacum, soil, water potential, effects on 9393.
- black shank, Nicotiana tabacum, disease control, fungicides+nematicides 4125.
- Phytophthora parasitica var.nictotianae**,
black shank, temperature, rainfall, effects on, pathogenesis, Nicotiana tabacum 3050.
- Phytoplankton**,
water pollution, aquaculture, association, Crassostrea gigas, food contamination 2924.
- Phytotoxidity**,
Alternaria solani phytotoxins, cell culture, plant cells 3902.
- Alternaria tagetis zinini, Tagetes erecta 9392.
- Exserohilum turcicum monocerin, Sorghum halpense 3959.
- microorganisms metabolites, soil pollutants, Cucumis sativa 4193.
- polysaccharides, in vitro biosynthesis, Colletotrichum trifolii 353.
- straw biodegradation, soil bacteria 8419.
- Streptomyces 9554.
- Phytotoxins**,
allelopathy, Polygonum aviculare 8683.
- Alternaria solani, phytotoxicity, cell culture, plant cells 3902.
- association, Guignardia laricina, shoot blight, Larix leptolepis 4161.
- Ceratocystis ulmi, detection, use, fluorescent antibody test, Ulmus 4167.
- Cochliobolus heterostrophus, biosynthesis, tox1 locus, gene regulation 2953.
- Corynebacterium insidiosum, bioassays, Medicago sativa 1114.
- deoxyradicin, structure, Alternaria helianthi 2367.
- disease resistance, plants, India, reviews 1369.
- fomoxin production, Fomes annosus, toxicity, seedlings, Picea sitchensis 6914.
- fruit rot, Macrophoma, isolation 8522.
- fungi, inhibition seeds germination, Guizotia abyssinica 2082.
- Gliocladium zaleskii, purification, characterization 2083.
- Guignardia laricina, structure, characterization 8521.
- Helminthosporium maydis, bioassays, use, Zea mays, roots, cells 8552.
- Macrophoma, macrophorins, isolation, structure 6718.
- Periconia circinata, effects on cytology, mitosis, roots, seedlings, Sorghum vulgare 9344.
- Periconia circinata, effects on ultrastructure, plasma membranes, roots, Sorghum vulgare 9345.
- Pseudomonas phaseolicola, induction, chlorosis, Phaseolus vulgaris 2989.
- Pythium aphandimerum, isolation, biochemical analysis, characterization 1098.
- receptors, plasma membranes, pathogens, plant diseases, reviews 2096.
- +rhizosphere microorganisms+pesticides, etiology, decline, Zea mays 367.
- rhizosphere microorganisms, inhibition roots growth, Malus pumila, roots 4141.
- Rhynchosporium oryzae, phytotoxicity, pathogenicity, scald, Oryza sativa 9348.
- Rhynchosporium secalis, binding membrane proteins, receptors, scald, Hordeum vulgare 9346.
- soil microorganisms, production 2346.
- structure, Alternaria kikuchiana 301.
- tagetoxin, Pseudomonas syringae, structure 6726.
- Valsa ceratospoma, isolation, identification 4904.
- Xanthomonas oryzae, purification, effects on, Oryza sativa, leaves 7640.
- Phybuterin**,
production, Nicotiana callus, association, Pseudomonas solanacearum infection 6845.
- Phybutrol**,
production, Nicotiana callus, association, Pseudomonas solanacearum infection 6845.
- Picea**,
forests, leaf litter decomposition, nutrient dynamics 2294.
- forests soil, soil microorganisms, sulfate conversion 6903.
- Picea abies**,
Chrysomya abietis infection, Darluca filum hyperparasitism 7781.
- disease resistance, root rot, Heterobasidium annosum, surveys, Norway 6918.
- forests, soils (organic), nutrient balance, soil microorganisms 9514.
- fungi wound infection, disease resistance 4176.
- Ploderma croceum, Pissolithus tinctorius, penetration, cell walls, ectomycorrhizas 3165.
- replacement, Fagus sylvatica forests clear cutting, bacteria soil microorganisms population changes 7779.
- Picea engelmannii**,
growth, land reclamation, mines, mycorrhizas inoculation 519.
- wood decay, brown rot 6936.
- Picea glauca**,
association, ectomycorrhizas, strip mines, soil amendment, effects on, spores 1410.
- mycorrhizas, effects on, growth 530.
- Picea pungens**,
Cytophora kunzei canker, drought effects on 5079.
- rust, Chrysomya weirii, pathology 8659.
- Picea sitchensis**,
forests, wood decay, C/N ratios 527.
- Laccaria laccata, effects on, growth 532.
- mycorrhizas, effects on, growth 530.
- phosphorus nutrient sources, mycorrhizas, seedlings 1441.
- seedlings, mycorrhizas inoculation 5857.
- seedlings, toxicity fomoxin, Fomes annosus 6914.
- seeds, Caloscypha fulgens penetration, pathogenesis 3174.
- Pichia**,
ethanol production 7527.
- food contamination, fruit juices, Venezuela 7574.
- Pichia burtonii**,
 α -amylase, exo-1,4- α -D-glucosidase, production 3691.
- Pichia cactophila**,
seasonal variation, rot, Opuntia stricta, food sources, Drosophila 3048.

- Pichia guilliermondii**,
GTP cyclohydrolase, purification, kinetics 7351.
serotonin effects on radioresistance 7025.
- Pichia pastoris**,
Candida utilis, amine oxidase (flavin-containing), physicochemical properties comparison 8240.
isolation, characterization, methanol utilization, single-cell protein biosynthesis 5466.
methanol, formic acid, metabolism, energetics 7546.
- Pichia polymorpha**,
2,1- β -D-fructan fructano-hydrolase, immobilized cells, hydrolysis, inulin 6495.
- Picornavirus**,
antiviral activity, food wastes fermentation, *Lactobacillus acidophilus*, *Saccharomyces cerevisiae* 7595.
- Pierce's disease**,
bacteria incidence, plants, vectors, USA, California 8531.
bacteria, *Oncometopia nigrans*, disease transmission, Citrus 1204.
bacteria, *Vitis vinifera*, pathogenesis 5027.
bacteria, wilt, seedlings, Citrus jambhiri 392.
gram-negative bacteria, pathology, *Vitis vinifera* 3058.
- Pieridae**,
biological control, persistence, baculovirus 1005.
- Pieris**,
biological control, persistence, baculovirus 1005.
- Pieris rapae**,
granulosis virus, nuclear polyhedrosis virus, *Brassica oleracea*, crop fields 6596.
- Pleisma quadratum**,
vectors, plant diseases, Rickettsia-like organisms, *Beta vulgaris* 6810.
- Pigmentation**,
plants penetration, tricyclazole effects on *Colletotrichum lagenarium* hyphal tips 325.
sclerotia, *Sclerotinia sclerotiorum*, pathogenicity, *Lactuca sativa* 6830.
- Pigments**,
Aeromonas salmonicida, analysis, aerobic conditions 8392.
Artemisia muscata, column chromatography 2849.
biosynthesis, *Nocardia fructiferi*, nitrogen sources, carbon sources, effects on 2590.
cyclopropyldiolisin, *Beuclaea gazogenes*, structure 8377.
Myxococcus coraloides, purification, antimicrobial activity 9667.
Pseudomonas cepacia, antibacterial activity, antifungal activity 1645.
removal, *Coriolus versicolor*, immobilized cells, pulp mills, industrial effluents 6952.
- Pigs**,
aflatoxinosis, aflatoxin B1, feeds contamination 3866.
animal wastes, digestion (anaerobic), *Clostridium*, *Bacillus* 5301.
animal wastes, digestion (anaerobic), substrates retention, relationship, bacteria levels 8908.
animal wastes, pH, temperature, effects on, *Salmonella typhimurium*, *Escherichia coli*, growth 8954.
Candida utilis single-cell protein, feeding trials, immune response, gastrointestinal tract 2929.
carcasses, abscesses, bacteria isolation, characterization 5619.
carcasses, bacteria food contamination, Norway 5618.
edema diagnosis, serological tests, *Escherichia coli* neurotoxins 3885.
feeding, *Hordeum vulgare*, contamination, ochratoxin A, *Aspergillus ochraceus*, detoxification 7623.
feeds, nutritive value, breweries activated sludge 5631.
feeds, *Streptococcus faecium* effects on intestinal microflora 4859.
Haemophilus pleuropneumoniae isolation, methodology 9958.
housing, dust, endotoxins, fungi, bacteria 7638.
immune response, foot-and-mouth disease virus vaccines, DEAE adjuvants 2600.
intestinal microflora, anaerobic bacteria, salinomycin administration effects on 5624.
isolates, *Escherichia coli*, R factors, drug resistance 7039.
isolates, gram-positive bacteria, tyrosin effects on macrolide antibiotics resistance 5156.
kidney, lesions, ochratoxin A, *Aspergillus ochraceus*, contamination, *Hordeum vulgare* 7622.
manure, degradation, coryneforms, odor compounds 8060.
manure, mesophilic bacteria, methanogenesis 4262.
mycotoxins 4895.
nutritive value, single-cell protein, *Manihot esculenta*, *Aspergillus fumigatus* 2932.
serum, pseudorabies virus antibodies, detection, immunodiffusion 5374.
urinary tract, animal isolates, bacteria, chemotherapeutics, drug sensitivity testing 2464.
wastes biodegradation, aerobic bacteria, heat output 2888.
wastes, *Sporonichium pulverulentum* biomass production 9102.
- Pilea cadierei**,
leafspot, *Myrothecium roridum* 5747.
- Pili**,
Enterobacter, hemagglutinins biosynthesis 8364.
Escherichia coli, antigens, agglutination assays 5383.
+ *Escherichia coli*, identification, use, receptors specificity agglutination 880.
Escherichia coli, purification methodology 7249.
Escherichia coli, receptors, hemagglutination, identification, blood group P1 5402.
Escherichia coli, separation methodology 9062.
Klebsiella, purification, characterization, adhesion, *Poa pratensis* roots 8660.
Neisseria gonorrhoeae, purification, affinity chromatography 835.
- Pilin**,
amino acid sequence, secondary structure predictions, *Pseudomonas aeruginosa* 4575.
- Piloderma croceum**,
penetration, cell walls, *Pinus sylvestris*, *Picea abies*, ectomycorrhizas 3165.
- Pimaricin**,
antibiotic sensitivity testing, yeasts 2502.
- Pinaceae**,
host specificity, fungi mycorrhizas 5901.
- o-Pinene,
biodegradation, *Pseudomonas maltophilia* 5582.
- Pink root**,
Allium cepa, new records, Sudan 1277.
- Pinus**,
blister rust, *Cronartium*, Rodentia, feeding damage 2318.
blue stain, *Ceratocystis minor*, vectors, *Dendroctonus frontalis*, *Tarsonemus* 3168.
Cercospora needle blight, India, eradication 5878.
Cronartium quercum f.sp. *fusiforme*, fusiform rust, virulence, population genetics, disease resistance 6913.
dieback, *Fusarium*, role mycotoxins 2315.
dieback induction, *Fusarium* extracts 2313.
fungi, biomass, spatial distribution, seasonal variations 515.
Fusarium moniliforme var. *subglutinans* pitch canker pathogenesis 6909.
fusiform rust, disease resistance 4148.
Grammella abietina infection, disease resistance 3175.
leaf litter, soil microorganisms, methyl bromide, diazomet, effects on 3250.
lignin biodegradation, fungi 171.
needle blight, *Cylindrocladium macrosporum*, pathogenesis, disease control 7782.
nutrient deficiency, fertilizer applications effects on mycorrhizas, saprophytes, soil 7775.
root rot, mortality, forests 5075.
roots, ozone effects on *Fomes annosus* pathogenicity 541.
wilt, *Bursaphelenchus xylophilus*, disease control, pesticides uptake 5877.
wood, extracts, inhibition, *Hyphomycetes*, growth, spore germination 4180.
wood, fungicides disease control, stain 5882.
wood storage, disease control, sap stain, 3-iodo-2-propenyl butyl carbamate, sodium pentachlorophenate, copper-8-quinolinate 9529.
- Pinus banksiana**,
pathology, rust, *Cronartium comptoniae* 4155.
pathology, rust, *Cronartium comptoniae*, association, *Phellinus pini* 548.
vesicular-arbuscular mycorrhizas, petroleum sand 5916.
- Pinus caribaea**,
Cercospora needle blight, India, eradication 5878.
Cylindrocladium scoparium diseases, Malaysia 2318.
needle blight, *Cylindrocladium macrosporum*, pathogenesis, disease control 7782.
- Pinus contorta**,
blister rust, *Cronartium coleosporioides*, relationship habitat, USA, Idaho 5862.
growth, land reclamation, mines, mycorrhizas inoculation 519.
infection susceptibility, pest attack, *Eurotium clavigerum*, *Dendroctonus ponderosae* 8551.
pathogenicity, *Verticillidiella*, black stain 9519.
rust, *Pendernium thelii*, association, *Arceuthobium americanum* 6932.
seedlings, mycorrhizas inoculation 5857.
- Pinus contorta subsp. latifolia**,
blister rust, effects on production, cones, seeds 4169.
nutrient dynamics, detritus, leaf litter, forest floor, USA, Wyoming 4139.
- Pinus contorta var. latifolia**,
fungi pathogenesis, association, *Dendroctonus ponderosae* transmission 3167.
- Pinus elliotii**,
dieback, *Phomopsis*, *Diplodia gossypina*, *Fusarium moniliforme* f.sp. *subglutinans* 5076.
- Pinus elliotii**,
Cercospora needle blight, India, eradication 5878.
Fusarium moniliforme var. *subglutinans* pitch canker pathogenesis 6909.
- Pinus elliotii**,
plantations, *Myrica cerifera* understory, nitrogen fixation 5853.
- Pinus elliotii var. elliotii**,
mortality, association, *Botryosphaeria dothidea* 5870.
rust, *Cronartium quercum* f.sp. *fusiforme*, triadimefon, disease control 9516.
- Pinus flexilis**,
growth, land reclamation, mines, mycorrhizas inoculation 519.
- Pinus greggii**,
Cercospora needle blight, India, eradication 5878.
- Pinus halepensis**,
susceptibility, fusiform rust, *Cronartium quercum* 6924.
- Pinus lambertiana**,
hypocotyls, *Cronartium ribicola* inoculation hyphae, pure culture 542.
hypocotyls, rot, *Fusarium oxysporum*, etiology 4160.
Lophodermium acuta infection, disease spread, effects on growth 1461.
- Pinus leucodermis**,
wood, soil, forests, *Basidiomycetes*, new records, Yugoslavia 7778.
- Pinus markusii**,
needle blight, *Cylindrocladium macrosporum*, pathogenesis, disease control 7782.
- Pinus monticola**,
blister rust, *Cronartium ribicola*, pathogenicity, genetic variance 1452.
blister rust, disease resistance, USA 8618.
canker, *Cronartium ribicola*, spatial distribution, environmental factors 4146.
pruning, disease control, blister rust, *Cronartium ribicola* 1457.
- Pinus mugo**,
susceptibility, fusiform rust, *Cronartium quercum* 6924.
- Pinus nigra**,
decline, *Verticillidiella procerca*, USA, Minnesota 5077.
leaves, *Cronartium flaccidum* association, basidiospores spore germination 4154.
susceptibility, fusiform rust, *Cronartium quercum* 6924.
Verticillidiella procerca pathogenicity, plantations 5083.
- Pinus oocarpa**,
needle blight, *Cylindrocladium macrosporum*, pathogenesis, disease control 7782.
- Pinus palustris**,
decay, brown rot fungi detection, fluorescence microscopy 4047.
Scirrhia acicola brown spot, pathology 6910.
- Pinus patula**,
Cercospora needle blight, India, eradication 5878.
mycorrhizas, *Telephora terrestris*, USA 2303.
- Pinus pinaster**,
Cronartium flaccidum infection, host-pathogen interactions ultrastructure 5088.
roots, ectomycorrhizas, *Pisolithus tinctorius*, chitin, biomass assays 9506.
susceptibility, fusiform rust, *Cronartium quercum* 6924.
- Pinus pinea**,
Cronartium flaccidum infection, host-pathogen interactions ultrastructure 5088.
susceptibility, fusiform rust, *Cronartium quercum* 6924.
- Pinus ponderosa**,
black stain, pathogenicity, *Verticillidiella*, *Leptographium* 5082.
Ceratocystis wagenieri infection, disease spread 1451.
Ceratocystis wagenieri infection, relationship, soil, redox potential 9518.
ectomycorrhizas, effects on, growth 6896.
host range, *Heterobasidion annosum* 4168.
Laccaria laccata, effects on, growth 532.
pest attack, *Scolytidae*, susceptibility, *Heterobasidion annosum*, *Verticillidiella*, root rot 5885.

- us ponderosa, (continued)**
seedlings, fertilizer applications, *Laccaria laccata* inoculation 5852.
- us radiata,**
Diplodia pinea infection, disease resistance, genetic analysis 3169.
orests, soil nitrogen mineralization 523.
most specificity, fungi mycorrhizas 5901.
hydrolyses, use, *Clostridium acetobutylicum*, 1-butanol production 8390.
hydrolyses, use, *Pachysolen tannophilus*, ethanol production 8411.
monoterpenes, effects on, *Dothiorhiza pini*, spore germination, needle blight 7193.
mycorrhizas, New Zealand 7774.
Pratylenchus penetrans infection, pathogenesis, Australia 8654.
protection, fungicides screening 7761.
roots, mantles, calcium oxalate crystals detection, association ectomycorrhizas symbiosis 4211.
seedlings, Diplodia pinea infection, relationship, temperature, condensation 7786.
seedlings, susceptibility, Diplodia pinea infection 7787.
stands, leaf litter, fungi, biodegradation 3796.
- us resinosa,**
decline, Verticilladiella procerca, USA, Minnesota 5077.
orests, organic matter decomposition, nitrogen cycle, ecosystem dynamics 526.
us roxburghii,
Cercospora needle blight, India, eradication 5878.
- us serotina,**
Fusarium moniliforme var. subglutinans pitch canker pathogenesis 6909.
- us silvestris,**
orests, leaf litter decomposition, nutrient dynamics, Sweden 2300.
leaf litter, decomposition, organic matter 2299.
- us strobus,**
air pollution sensitivity, relationship Pissodes approximatus Hylobius, infestation, Verticilladiella procerca infection 5866.
plaster rust, Cronartium ribicola, disease control, pruning 1466.
decline, Verticilladiella procerca, USA, Minnesota 5077.
roots, Pisolithus tinctorius, Hartig net, cytology 9510.
roots, plant diseases, association, Verticilladiella 5873.
Verticilladiella procerca pathogenicity, plantations 5083.
- us sylvestris,**
plaster rust, *Suillus luteus*, infection monitoring, chitin, mannans, levels 3170.
ectomycorrhizas, effects on, growth 6896.
leaf litter decomposition, nitrogen balance, nutrient dynamics 3161.
leaves, Cronartium flaccidum association, basidiospores spore germination 4154.
leaves, fungi infection, relationship, age 4177.
mycorrhizal nitrogen fertilization effects on population decline 3163.
phytoplasm microorganisms, fungal flora, needlecast 9521.
Ploederma croceum, penetration, cell walls, ectomycorrhizas 3165.
survival, reforestation, blight, Phacidium infestans, canker, Gremmenella abietina 4164.
susceptibility, fusiform rust, Cronartium quercuum 6924.
Verticilladiella procerca pathogenicity, plantations 5083.
- us taeda,**
Bacillus thuringiensis persistence, biological control, Dioryctria amatella 7484.
Cronartium quercuum f.sp. fusiforme, infection, colonization, ultrastructure 4166.
leafback, Phomopsis, Diplodia gossypina, Fusarium moniliforme f.sp. subglutinans 5076.
disease resistance, fusiform rust, Cronartium quercuum f.sp. fusiforme, genotype-environment interactions 6908.
disease resistance, rust, Cronartium quercuum f.sp. fusiforme 5805.
Fusarium moniliforme var. subglutinans pitch canker pathogenesis 6909.
nines ectomycorrhizas effects on, land reclamation, mines 2305.
mortality, association, Botryosphaeria dothidea 5870.
mycorrhizas, soil amendment, land reclamation, mines, revegetation 2302.
necrotic rot, epidemiology, Fusarium moniliforme var. subglutinans 1467.
oots, plant diseases, association, Verticilladiella 5873.
seeds, pitch canker epidemiology 543.
- us virginiana,**
Fusarium moniliforme var. subglutinans pitch canker pathogenesis 6909.
- us willichiana,**
Cercospora needle blight, India, eradication 5878.
- ipiculate dehydrogenases,**
purification, characterization, Rhodotorula glutinis 34.
- olines,**
copper, disinfection apparatus, bacteria growth 5344.
oil, Canada, bacteria biodegradation, hydrogen sulfide production association 7018.
- omide acid,**
antibacterial activity comparison, pefloxacin, nalidixic acid, flumequin 8761.
antibacterial activity, Enterobacteriaceae, gram-positive cocci 7924.
rug sensitivity testing, disc-diffusion test, Pseudomonas aeruginosa 7916.
- er bellii,**
Xanthomonas beticola leafspot, disease resistance 4023.
- er nigrum,**
extracts, antifungal activity 1570.
leafspot, Xanthomonas campestris, relative humidity effects on pathogenicity 410.
otato virus Y, disease transmission, vectors, Aphididae 9400.
seeds, Xanthomonas campestris infection, survival 412.
pot, Xanthomonas campestris pv. vesicatoria, disease control, association, copper sensitivity 6878.
- ercillins,**
6-acetyl-methylene-penicillanic acid, antibacterial activity, Pseudomonas aeruginosa 3405.
antibacterial activity 8844.
antibacterial activity 9757.
- ntibacterial activity,** Acinetobacter calcoaceticus subsp. anitratus, Acinetobacter calcoaceticus subsp. lawii 7979.
ntibacterial activity, Bacteroides fragilis 7129.
ntibacterial activity, Escherichia coli, Streptococcus faecalis 739.
ntibacterial activity, Pseudomonas aeruginosa 9732.
ntibacterial activity, Pseudomonas aeruginosa, agar diffusion test 728.
ntibiotic sensitivity testing, gram-negative bacilli 8001.
ntibiotic synergism, \pm amikacin, \pm gentamicin, antibacterial activity, Pseudomonas aeruginosa 755.
operazone, antibiotic antagonism, gram-negative bacteria, Staphylococcus, Enterobacteriaceae 3387.
ability, β -lactamase 2543.
- Piperazinomycin,**
characterization, antifungal activity 1644.
structure 1651.
- Pirilmycin,**
bactericidal activity, Bacteroides fragilis 757.
- plomicid acid,**
antibacterial activity, Staphylococcus aureus, Enterobacteriaceae 1556.
- plasin,**
phytoalexins, production, Lathyrus sativus, association, Botrytis cinerea infection 6846.
- Pisces,**
animal isolates, Aeromonas, Flavobacterium, Pseudomonas, R factors 3275.
incidence, Vibrio haemolyticus, Kenya 1069.
intestinal microflora, bacteria, pollution indicators, water pollution, Iran 1725.
methodology, isolation, Aspergillus pathogens 9078.
pathogens, Vibrio, Pasteurella, biological properties, identification methodology 1785.
- Pisolithus tinctorius,**
ectomycorrhizas, chitin, biomass assays, roots, Pinus pinaster 9506.
ectomycorrhizas, effects on Pinus taeda, land reclamation, mines 2305.
ectomycorrhizas, water potential, water relations, seedlings, Quercus velutina 9508.
effects on Malus domestica roots growth, association, indole-3-acetic acid 591.
growth, cadmium, lead, nickel, effects on 3189.
growth rate, mycorrhizas, Eucalyptus styhnei 6950.
Hartig net, cytology, roots, Pinus strobus 9510.
indole-3-acetic acid, gas chromatography, mass spectroscopy 8171.
penetration, cell walls, Picea abies, ectomycorrhizas 3165.
- Pissodes approximatus,**
infestation, relationship air pollution sensitivity, Verticilladiella procerca infection, Pinus strobus 5866.
- Platichloa,**
contamination, microorganisms, ice cream production, association, radiation treatment 4838.
- Plum,**
wilt, Fusarium solani 329.
- Plum sativum,**
Acyrtophosphon plum pea streak virus transmission, Medicago sativa 3908.
asymptomatic infection, Fusarium oxysporum f.sp. ciceri 4938.
bacteroids viability, Rhizobium 7860.
blight, Alternaria alternata 1136.
common bean mosaic virus infection, yield, productivity, growth rate 8539.
cucumber mosaic virus infectivity, dark, inoculum preparation methodology effects on 7655.
cultivars, disease resistance, downy mildew, Peronospora viciae, sporulation 3141.
disease resistance, footrot, Phoma medicaginis var. pinodella, screening 7753.
disease resistance, Mycosphaerella pinodes infection, Ascochyta fabae effects on 480.
disease resistance, Peronospora viciae penetration, downy mildew 3142.
ecotypes, Rhizobium leguminosarum incompatibility 5940.
Erysiphe pisi inoculation methodology 9336.
Fusarium solani infection, protection, cutinase inhibition, association, organophosphorus 500.
genotypes, Rhizobium leguminosarum nodulation nitrogen fixation association 5951.
grey mold, Botrytis cinerea 7663.
infection, pathogenicity, tomatine resistance Fusarium solani 6741.
leaves, endopolygalacturonase inhibitor, purification, induction Ascochyta pisi infection 1350.
leaves, pea infection mosaic virus infection, pathogenesis 3930.
necrosis, Ascochyta pisi, toxins, pathogenicity 1140.
nitrogen fixation, Rhizobium leguminosarum, acetylene reduction relationship hydrogen gas production 9585.
nitrogen nutrient uptake, inhibition nitrogen fixation 8685.
nodules, cytokinins levels, Rhizobium leguminosarum 5120.
pathogenicity, Fusarium oxysporum f.sp. pisi, temperature effects on 7653.
pea infection mosaic virus, bean yellow mosaic virus, disease transmission, Myzus persicae, Acyrthosiphon pisum 2101.
penetration, Fusarium solani f.sp. pisi, pesticides (organophosphorus) inhibition 2279.
plant diseases, surveys 7659.
powdery mildew, antifungal agents, disease control, Erysiphe polygoni 8637.
powdery mildew, Erysiphe polygoni, sulfur fungicides, disease control 4123.
Pratylenchus invasion inhibition, Thielaviopsis basicola infection role 9333.
Pseudomonas syringae pv. pisi blight, incidence, Israel 9335.
Pythium rot, biological control, Enterobacter cloacae seed treatments 9481.
red clover mottle virus, stability, infectivity, factors affecting 2099.
root rot, Aphanomyces euteiches f.sp. pisi, pathogenesis 9319.
seed-borne diseases, detection, Mycosphaerella pinodes, Macrophomina phaseolina, Phoma medicaginis var. pinodella, Fusarium oxysporum 6732.
seeds, Pseudomonas antagonism, Trichoderma hamatum, association, Pythium rot, biological control 5820.
stem rot, Rhizoctonia solani, interaction root rot, Fusarium solani f.sp. pisi, Pythium ultimum, Aphanomyces euteiches 9328.
subterranean clover red leaf virus infection, purification, characterization 1146.
symbiosis, Rhizobium leguminosarum, hydrogen recycling effects on nitrogen fixation 3229.
symbiosis, Rhizobium leguminosarum, nitrogen fixation 7852.
symbiosis, vesicular-arbuscular mycorrhizas, colonization 5902.
wilt, Fusarium oxysporum f.sp. pisi, disease resistance, electrophoresis 4065.
wisteria vein mosaic virus infection, cytology 2164.
- Plum sativum subsp. avense,**
disease resistance, Phoma medicaginis var. pinodella infection, screening 478.
- Pitch canker,**
Fusarium moniliforme var. subglutinans, epidemiology, Pinus taeda 1467.
Fusarium moniliforme var. subglutinans, pathogenesis, Pinus 6909.
Pinus taeda seeds, epidemiology 543.
- Plithomyces charitum,**
mycotoxins, food contamination, incidence, British Isles 3878.
spores, spores/min purification methodology, high-pressure liquid chromatography 3813.
spores/smoldes, toxicity, role superoxide radicals formation, in vitro 274.
- Pityrosporum ovale,**
antifungal activity, benzoyl peroxide 7084.

- Plains**, South Africa Rep., microorganisms populations 4217.
- Plant breeding**, *Arachis hypogaea*, disease resistance, black pod, *Thielaviopsis basicola* 9465. *Arachis hypogaea*, disease resistance, blight, *Sclerotinia minor* 1342. Beta, disease resistance, root rot, *Erwinia* 1376. Beta vulgaris, disease resistance, beet yellows virus 2244. Cajanous cajan, disease resistance, *Phytophthora drechsleri* f.sp.cajani 5038. Cucurbitaceae, disease resistance, cucumber mosaic virus infection 3118. disease control, *Rhynchosporium secalis*, leaf blotch, *Hordeum vulgare* 5809. disease control, *Septoria lycopersici* leafspot, *Lycopersicon esculentum* 5048. disease resistance, bacteria, fungi, phytoalexins biosynthesis, energetics 4059. disease resistance, fungi, Gramineae 2241. disease resistance, plant diseases, genetic analysis, conferences 7278. disease resistance, plant diseases, genetics 2971. disease resistance, rust, *Anthraxum* 3140. disease resistance, stem rust, *Triticum aestivum* 447. disease resistance, *Verticillium dahliae* wilt, seedlings, *Lycopersicon esculentum* 5045. *Festuca arundinacea*, disease resistance, crown rust, *Puccinia coronata* 448. gemplasm, disease control, viruses, crops 2242. Glycine max cultivars, disease resistance, stem rot *Phialophora gregata* 5040. Glycine max, disease resistance, stem rot, *Phialophora gregata* 5040. Glycine max, disease tolerance, *Phytophthora root rot*, USA, Ohio 7856. interspecific hybridization, *Arachis*, *Cercospora arachidicola*, disease resistance 7727. *Lasioleza cuneata*, disease resistance, *Rhizoctonia* blight 8666. *Lycopersicon esculentum*, disease resistance, speck, *Pseudomonas syringae* pv.tomato 6842. maize dwarf mosaic virus disease resistance genes, levels, genetic analysis, Zea mays 4092. *Medicago sativa*, disease resistance, *Verticillium* wilt 7669. *Penicillium americanum*, blue mold, powdery mildew, wildfire 1339. *Penicillium americanum*, cytoplasmic male sterility, susceptibility, downy mildew, *Sclerospora graminicola* 5807. *Phaseolus aureus*, disease resistance, mungbean yellow mosaic virus 446. *Phaseolus*, disease resistance, white mold, *Sclerotinia sclerotiorum* 1365. *Rhizoglyphum*, x *Ribes rubrum*, disease resistance, *Sphaerotheca* 1345. *Sclerotium oryzae* disease resistance, *Oryza sativa* 7743. *Sorghum vulgare*, disease resistance, downy mildew, *Peronosclerospora sorghi* 4061. tobacco mosaic virus disease resistance, inheritance, *Nicotiana tabacum* 3117. *Triticum aestivum* cultivars, disease resistance, leaf rust, *Puccinia recondita* f.sp.tritici 1338. *Triticum aestivum*, disease resistance, barley yellow dwarf virus 445. *Triticum aestivum*, disease resistance, glume blotch, *Septoria nodorum* 3123. *Triticum aestivum*, disease resistance, stem rust, *Puccinia graminis* f.sp.tritici 8803. *Triticum aestivum*, height, disease resistance, leaf blotch, *Septoria tritica* 454. Zea mays, disease resistance, *Kabatella zaeae*, eyespot 9456. Zea mays, disease resistance, maize dwarf mosaic virus 8604. Zea mays, disease resistance, wilt, *Erwinia stewartii* 1346. Zinnia elegans, x Zinnia angustifolia interspecific hybridization, Erysiphe cichoracearum disease resistance 7729.
- Plant cells**, Agrobacterium tumefaciens binding, host range, crown gall 2977. cell culture, phytoxicity, Alternaria solani phytoalexins 3902. detection methodology, plant viruses 4473.
- Plant communities**, deserts, thermophilic microorganisms, dehydrogenase activity, soil characteristics, soil moisture 9559. nutrient sources, nitrogen, phosphorus, rhizosphere microorganisms, nival zone 4213. soil microorganisms activity, soil moisture, organic matter, deserts 8665.
- Plant debris**, biodegradation, microorganisms, acids effects on, lakes, polar environments 1995. Carex, biodegradation, USA, Alaska, lakes, nutrient enrichment effects on 2023. decomposition, leaching, soil microorganisms, Trifolium 566. decomposition, organic matter formation, soil 1491. *Pseudomonas syringae* pv.lachrymans survival, association, pathogenicity, Cucumis sativus 9574.
- Plant diseases**, alfalfa mosaic virus, host range, Lycium 3085. alfalfa mosaic virus, host range, New Zealand 9317. arbocho latent virus characterization, ultrastructure, geographical distribution 315. Ascomycetes, deuteromycetes, Ramularia, ecological distribution, France 2207. Aspergillus, Alternaria, phytoalexins disease resistance, India, reviews 1369. association *Phytophthora cinnamomi*, soil distribution, bioassays 539. association, *Verticillium*, *Pinus taeda*, *Pinus strobus* 5873. bacteria, plants extracts, antibacterial activity 9666. bacteria, vectors, Insecta, reviews 2969. biological control, microorganisms, books 4550. biological control, phylloplane, reviews 3147. books 9095. Brassica napus, surveys, Canada 7692. *Colletotrichum acutatum*, Tsuga heterophylla seedlings, new records, Canada 7783. conferences 910. conferences 1820. conferences 3638. conferences 3639. conferences 6369. conferences 10003. conferences, viruses, bacteria, fungi 7280. crops, disease spread, models 366. crops, trickle irrigation 5867. *Cylindrocyladium*, Eucalyptus, pathology 4178. diagnosis relationship, plant viruses RNA, isolation, analysis, methodology 9866. disease control, bacteriocins, bacteriocinogeny 5843. disease control, fungicides 7758. disease control, fungicides 7759. disease control, fungicides, foliar applications 8636. disease control, suppression, soil, books 904. disease resistance, defense mechanisms, reviews 1336. disease resistance, plant breeding, genetic analysis, conferences 7278. disease resistance, plant breeding, reviews 2971. disease spread, mathematical models 9382.
- Plant diseases, (continued)** epidemics, mathematical models 3986. epidemiology, host-pathogen interactions, genetic factors, disease resistance, books 9998. epidemiology, meteorology sensors, aspiration systems 8530. epidemiology, relationship planting density, reviews 2972. etiology, genetic analysis, reviews 2970. fungi, baycor, disease control, *Malus pumila* 1421. fungi, epidemics, mathematical models 3906. fungi, epidemiology, roots growth, reviews 3903. fungi, fungicides resistance, conferences 2730. fungi, Glycine max, Gramineae, seed treatments, fungicides, reviews 4132. fungi, Gramineae, disease control 5829. fungi, Hevea brasiliensis, disease control 5087. fungi, mortality, pollution effects, air pollution, forests 6926. fungi, new records, New Zealand 322. fungi, ornamental plants, trees, fungicides 9480. geminivirus, tropical environment 4921. Glycine max, surveys, Nepal 7660. helper viruses, reviews 2979. Hordeum, fungicides treatment 497. imported diseases, crops 5666. infection susceptibility, pest attack, *Pinus contorta*, *Euophium clavigerum*, *Dendroctonus ponderosae* 8651. leaves lesions, measuring techniques, computer applications, video image analysis 4924. Leguminosae, surveys 7659. Lilium longiflorum 9417. mathematical models, tissues disease spread 1117. Mycoplasma, antibiotics treatment, technology 5839. Mycoplasma, electron microscopy, reviews 5316. mycoplasma-like organisms, effects on stomata, Ulmus 3171. mycoplasma-like organisms, rickettsia-like organisms, viruses, vectors, Insecta 1120. Nilaparvata lugens, Fusarium oxysporum, biological control 3719. pathogenicity, measuring techniques, mathematical models 1116. pathogens, biological control, weed control, developing countries 7472. pathogens, genetic interaction, vesicular-arboviral mycorrhizas 317. pathogens, natural selection, reproductive strategy, mathematical models 2976. pathogens, phytoalexins receptors, plasma membranes, role 2096. pathogens, population ecology, limiting factors, environmental factors 5698. pathology, Trifolium repens, *Medicago sativa*, alfalfa mosaic virus, phaseolus vulgaris, bean common mosaic virus 2996. phytopathogenic fungi, fungicides resistance 8725. Pierce's disease, cotton stunt, bacteria detection 320. plant viruses, single-stranded DNA 4923. *Puccinia striiformis*, staining methodology 6730. reviews 7647. *Rhizoctonia solani*, taxonomy, mating types, pathogenicity, reviews 2974. role, fungicide, reviews 1119. role, potato spindle tuber viroid structure, physicochemical properties, reviews 8529. roots, crops, fungi, bacteria 9411. roots, *Rhizoctonia solani*, *Rhizoctonia zaeae*, interaction, herbicides, Zea mays 5706. soil suppression, biological control, conferences 1818. soil-borne diseases, biological control 9472. *Stenotaphrum secundatum*, plant viruses, characterization 4950. *Triticum*, fungi, disease control, fungicides 5830. *Vigna unguiculata*, *Fusarium equiseti*, *Pseudomonas*, factors affecting pathogenesis 4931. virulence, relationship, *Pseudomonas syringae* pv.syringae outer membranes protein composition 7307. viruses, books 9094. viruses, conferences, books 2728. viruses, disease control, repellents, Myzus persicae 459. viruses, disease spread, agricultural practices, reviews 2978. viruses, disease transmission, Aphididae 1122. viruses, identification, Vitis vinifera 1283. viruses, Spermatophyta, pathology, books 8178. viruses, susceptibility, *Physalis peruviana* 3063.
- Plant extracts**, antibacterial activity 6045. antifungal activity, storage fungi 7934. *Helianthus tuberosus*, inulin, use, Saccharomyces rosei, ethanol production 8410. oils, chemical control, *Nephrolepis virescens*, vectors, disease transmission, rice tungro virus 7737. *Phaseolus vulgaris*, *Pseudomonas phaseolicola* cell agglutination, role, pathogenesis 8540. Solanum melongena, Capsicum frutescens, *Lycopersicon esculentum*, +*Verticillium dahliae* leaf infection, antifungal activity, *Cladosporium cucumerinum* 6877.
- Plant protection**, fungi infection, *Sorghum bicolor*, Zea mays, *Triticum aestivum*, coatings, waxes, plastics 4071.
- Plant viruses**, antiviral activity, *Cuscuta reflexa* extracts 6072. antiviral activity, *Phytolacca americana* proteins, relationship disease resistance, reviews 9478. Australia, reviews 8528. detection methodology, plant cells 4473. disease control, mineral oil, vegetables oils 5813. hybridization analysis methodology, *Vicia faba* tissues 9865. inclusions, glutaraldehyde fixation, structure 4472. infection, Lilium, growth inhibitors effects on 7703. Leguminosae, identification, USA, Tennessee 5689. maize dwarf mosaic virus, vectors, *Schizaphis graminum*, disease transmission, Gramineae 574. plants, New Zealand, host range, arabis mosaic virus, tomato spotted wilt virus 6731. RNA 5'-terminus, hybridization analysis methodology 9867. RNA, isolation, analysis, methodology, relationship plant diseases diagnosis 9866. single-stranded DNA, plant diseases 4923. *Stenotaphrum secundatum*, plant diseases, characterization 4950.
- Plantago lanceolata**, infection, nibgrass mosaic virus 2174.

- Plantago major**, disease reservoirs, tomato ringspot virus, prunus 1209.
infection, ribgrass mosaic virus 2174.
- Plantations**, Abies balsamea, Armillariella mellea infection 7788.
agricultural ecosystems, nitrogen cycle, Coffea 3217.
Coffea, nitrogen cycle, leaf litter decomposition 3218.
nitrogen cycle, nutrient sources, Theobroma cacao 3219.
nitrogen cycle, Theobroma cacao 3222.
Pinus strobus, Pinus sylvestris, Pinus nigra, Verticillidiella protera pathogenicity 5063.
Pseudotsuga menziesii, needlecast, Rhabdocline weirii subsp. oblonga, Rhabdocline pseudotsugae subsp. pseudotsugae 5864.
- Planting**, dates, use, disease control, Hordeum vulgare 7676.
time, relationship, Claviceps fusiformis ergot, incidence, Pennisetum typhoidum 5712.
- Planting density**, Hordeum vulgare, effects on root rot, Cochliobolus sativus 7674.
Phaseolus vulgaris, effects on nitrogen fixation 6983.
relationship plant diseases, epidemiology, reviews 2972.
- Plants**, aflatoxins, toxicity, mechanisms, reviews 5647.
association, Basidiomycetes mycelia growth, soil 1478.
Australia, host range, Eutypa armeniacae 3900.
bacteria crown gall induction 4928.
bedding, Rhizoctonia damping-off, isolates characterization 2194.
Conidioporus pengzi infection, pathogenesis, host range 3992.
dieback disease control, soil mixtures 4925.
disease control, benzimidazole derivatives, Rhizoctonia 490.
disease resistance, host-pathogen interactions, genetic factors 468.
diseases, fungi, new records, New Zealand 3899.
endomycorrhizas symbiosis, + methyl bromide fumigation, growth association, field trials 5910.
extracts, antibacterial activity, bacteria, plant diseases 9666.
extracts, antibacterial activity, Iran 2458.
extracts, antiviral agents, vaccinia virus 3343.
food contamination, aflatoxins, detection methodology 6688.
frost damage, ice nucleation bacteria 4130.
gene transfer, Ti plasmid, Agrobacterium tumefaciens infection 4922.
genetic engineering, Agrobacterium tumefaciens crown gall 9318.
germplasm, viruses infection, seed-borne diseases, surveys 2092.
greenhouses, powdery mildew disease control, etaconazole treatment 5004.
growth, Gossypium hirsutum, relationship wilt, mathematical models 2134.
growth inhibitors, Streptomyces, characterization 6363.
growth, relationship, wastewater treatment nutrients removal 5329.
hop stunt disease virus infection, localization, leaves cells 313.
host range, tobacco mosaic virus, association defoliation 4024.
host-pathogen interactions 8185.
host-pathogen interactions, Spiroplasma 5665.
infection, dandelion latent virus, purification, characterization, Taraxacum officinale isolates 416.
infection, tobacco streak virus, host specificity, pathogenesis, disease transmission 1126.
inhibitors, replication, viruses 3156.
Insecta pathogenicity, biological control, viruses, fungi, books 9093.
isolation, Rhizoctonia solani, seasonal variations, soil 2097.
leaves, phenols solubility proteins electrophoresis, relationship, viruses infection 2982.
leaves, ribonuclease, inhibition multiplication, tobacco mosaic virus, potato virus X 2095.
lignin, biodegradation, carbon incorporation, soil 5599.
maize white line mosaic virus infection, disease transmission, USA, Ohio 1200.
microorganisms infection, 2-chloroethylphosphonic acid effects on pathogenicity 319.
mixed infection, Meloidogyne incognita-Rhizoctonia bataticola, effects on growth 4992.
Mycoplasma infection, tetracyclines treatment 5840.
necrosis, Pseudomonas syringae pv. tomato, etiology 3065.
Nematoda, rhizosphere, vesicular-arbuscular mycorrhizas inhibition 5095.
nitrogen fixation, nodules, association Rhizobium japonicum 1511.
nodules, nitrogen fixation, Frankia strains nitrogenase activity 4239.
okra mosaic virus host range 3905.
pathogenicity, Mycoplasmales, conferences 6363.
pathogens, fungi, new records, New Zealand 326.
pathogens, fungi, solar radiation effects on viability 4919.
pathogens, preservation, gels + cold storage 2688.
pathogens, seed-borne diseases, quality control assays 2968.
penetration, pigmentation, tricyclazole effects on Colletotrichum lagenarium hyphal tips 325.
phytotoxins, disease resistance, India, reviews 1369.
Pierce's disease bacteria incidence, vectors, USA, California 8531.
plants, viruses, host range, arabis mosaic virus, tomato spotted wilt virus, New Zealand 6731.
potyvirus infection, pathogenicity, Populus isolates 316.
rare species, fungi, diseases, USSR 7646.
Rhizoctonia solani, soil-borne diseases control, antifungal agents USA, association, manure applications 323.
Rhynchosporium secalis infection, herbicides effects on spores quantity 486.
root rot, pathogens, inhibition, rhizosphere microorganisms 1118.
saw, alfalfa mosaic virus, detection methodology 2980.
seedlings, Pythium infection, damping-off, greenhouses 1265.
seedlings, roots respiration, Phytophthora cinnamomi infection 5668.
seeds, Azotobacter chroococcum inoculation, effects on yield 7800.
soil amendment, humification 2324.
soil-borne diseases, bark composts inhibition 3122.
Spiroplasma citri, isolation, culture 1769.
stimulation, disease resistance, infection, fungi, bacteria, viruses 3120.
stunt, methyl bromide fumigation induction, endomycorrhizas role growth 5913.
tobacco mosaic virus infection 9437.
tropical environment, Azospirillum rhizosphere microorganisms, identification, incidence 7853.
tropical environment, soil microorganisms, effects on, yield, books 8181.
tumors, molecular structure, books 8173.
vegetables, disease control, infection, fungi, bacteria 2267.
vesicular-arbuscular mycorrhizas symbiosis, use, agricultural practices, reviews
- Plants, (continued)**
4188.
viruses, antigenic variants detection, enzyme-linked immunosorbent assay 1757.
viruses, chemicals, induction, disease resistance, reviews 7751.
viruses, detection, identification, immunoelectron microscopy use 4926.
viruses disease transmission, Nematoda, association feeding behavior 1121.
viruses infected, methodology, isolation, double-stranded RNA 3897.
viruses infection, association, tissues color, calcium chloride preservatives 2093.
viruses infection, detection, enzyme-linked immunosorbent assay, sensitivity 3530.
viruses infection, double-stranded RNA, isolation 2981.
viruses infection, ribavirin, 2,4-dioxo-hexahydro-1,3,5-triazine, treatment 312.
- Plaque assay**, adenovirus (human) 5 5372.
influenza A virus, drug resistance, remantadine, amantadine 9635.
neutralization, poliovirus 6298.
- Plaque index**, dental canes, acid production, sodium fluoride, mouthwashes, man 7210.
- Plaques**, diameter, phages, measuring techniques 832.
herpesvirus, autoradiography, thymidine kinase levels 9838.
- Plasma membranes**, Candida albicans, freeze-fracture, antifungal activity, amphotericin B 8009.
Candida albicans, sterol composition, antibiotic resistance, nystatin 3277.
Candida, imidazoles effects on potassium release 6061.
fatty acid composition, polymyxin antibiotic resistance, Pseudomonas aeruginosa 7040.
Periconia circinata phytotoxins effects on, roots, Sorghum vulgare 9345.
phytotoxins receptors, pathogens, plant diseases, reviews 2096.
Pseudomonas aeruginosa, solubilization, sodium dodecyl sulfate 9664.
Saccharomyces cerevisiae, adenylate cyclase characterization 932.
Saccharomyces cerevisiae, freeze-fracture, crystal-optics, association, resistance evaporation use 4514.
- Plasmidophora brassicae**, clubroot, Raphanus sativus, pathogenicity, association, soil moisture, soil temperature 6815.
- Plasmids**, antibiotic resistance, β -lactam antibiotics, aminoglycoside antibiotics, Shigella sonnei 4278.
antibiotic resistance, genetic control, Escherichia coli 2394.
antibiotic resistance, structure, incidence, Enterobacteriaceae 6025.
antibiotic resistance, trimethoprim, gram-negative bacteria, isolation, characterization 7872.
association bacteria, antibiotic resistance, aminoglycoside antibiotics, epidemiology, France 6006.
association, bacteria, resistance, antimicrobial agents, metals, ions, reviews 8735.
Bacillus subtilis, acridine orange effects on polyglutamic acid biosynthesis 1846.
Bacillus thuringiensis subsp. israeliensis, association biological control, Culexidae larvae 2842.
Beijingensis, hydrocarbons biodegradation 5144.
Campylobacter, isolation, methodology 5423.
cloning, Bacteroides fragilis subsp. thetaiotaomicron, DNA fragments, identification association 4487.
conjugate, analysis, Staphylococcus aureus gentamicin antibiotic resistance 8738.
DNA, isolation, characterization, electron microscopy, Escherichia coli 6340.
DNA isolation, Streptococcus lactis bacteria 9047.
drug resistance, gentamicin, conjugation, Staphylococcus 3273.
drug resistance, Vibrio anguillarum, conjugation, Vibrio parahaemolyticus 6015.
Enterobacteriaceae, antibiotic resistance, distribution, trimethoprim, gentamicin infection 3302.
enterotoxins, Escherichia coli, gene transfer, antibiotic resistance 3299.
Escherichia coli, copies, measuring techniques 7248.
Escherichia coli, genetic control, antibiotic resistance, fusidic acid, ring, chloramphenicol acetyltransferase 9649.
R factor RPAL, aminoglycoside acetyltransferase, aminoglycoside phosphotransferase, kinetics, mechanisms 8271.
R factor R26, R factor R55-1, antibiotic resistance, chloramphenicol, analogs, Escherichia coli 654.
R factors, U.V. radiation resistance, Pseudomonas aeruginosa 7037.
R factors, Aeromonas, Flavobacterium, Pseudomonas, animal isolates, Pisces 3275.
R factors, ampicillin antibiotic resistance, Salmonella typhimurium 646.
R factors analysis, Enterobacteriaceae drug resistance, association, nosocomial infection 1541.
R factors, antibiotic resistance, drug resistance, Pseudomonas aeruginosa 6031.
R factors, antibiotic resistance, drug resistance, Staphylococcus aureus 2403.
R factors, antibiotic resistance, kanamycin, tetracycline, Rhizobium japonicum 7875.
R factors, antibiotic resistance, Salmonella typhi 7876.
R factors, antibiotic resistance, Shigella 7044.
R factors, carbadox drug resistance, host range, Escherichia coli, animal isolates 7038.
R factors, conjugation, drug resistance, hexachlorophene, Escherichia, Salmonella, Pseudomonas 6030.
R factors, conjugation, incompatibility, identification methodology 3551.
R factors, Enterobacteriaceae, antibiotic resistance transfer, wastewater treatment 1548.
R factors, Enterobacteriaceae, role, antibiotic resistance transfer 1543.
R factors, Escherichia coli, antibiotic resistance, animal isolates, chickens 7043.
R factors, Escherichia coli, isolates, man, cattle, chickens, pigs 7039.
R factors, host range, man, normal subjects 7882.
R factors, incidence, antibiotic resistance, water isolates, Escherichia coli 7204.
R factors, Salmonella typhimurium antibiotic resistance 5159.
R factors, Salmonella typhimurium, association, drug resistance, Kuwait 5150.
R factors, Salmonella typhimurium, clinical isolates, characterization, India 2409.
R factors, Streptococcus pneumoniae clinical isolates, detection, association, antibiotic resistance 5163.
R factors, use, virulence plasmids transfer, Agrobacterium rhizogenes 4488.
Frankia, nodules, Alnus glutinosa 560.
gene transfer, drug resistance, trimethoprim, Enterobacteriaceae 3298.
genetic control, toxins, production, Bacillus anthracis 2085.

Plasmids, (continued)

- genetic engineering, bacteria, yeasts, methodology 5364.
Neisseria meningitidis, bacteria, antibiotic resistance, characterization, transfer, β -lactamase 644.
 Hy plasmid, Enterobacteriaceae, antibacterial activity, surfactants, effects on 4296.
 Inc plasmids, bacteria, classification methodology 6335.
 Inc plasmids, classification, use, phages lysis bacteria 9879.
 isolation methodology, *Escherichia coli* 9875.
 isolation methodology, starter cultures, Streptococcus 4493.
 mediated, mercury resistance freeze-thawing effects on *Pseudomonas aeruginosa* 3265.
 mediation β -lactamase production, *Escherichia coli*, screening methodology 534.
Neisseria gonorrhoeae, antibiotic resistance, penicillin 3270.
 plasmid pB4, transfer, clindamycin antibiotic resistance, *Bacteroides fragilis* 5149.
 plasmid pBS12, U.V. radiation resistance, *Pseudomonas aeruginosa* 7037.
 plasmid pBS31, U.V. radiation resistance, *Pseudomonas aeruginosa* 7037.
 plasmid pLI1008, *Rhizobium leguminosarum*, transfer, relationship, nitrogen fixation, nodulation 595.
 plasmid pKH80, relationship *Escherichia coli* antibiotic resistance 631.
 plasmid pMB9, plasmid pBR322, antibiotic resistance, association, cadmium sensitivity, *Escherichia coli* 1536.
 plasmid pPD1, transfer, *Escherichia coli*, Enterobacteriaceae, nitrogen fixation 5113.
 plasmid pSM1, role, monensin biosynthesis 2744.
 plasmid pSRQ50, *Pseudomonas putida*, role, metabolism, β -citronellol, geraniol 6642.
 plasmid pSV1, Streptomyces violaceus-ruber, role, methylenomycin A biosynthesis 763.
 plasmid R1d9-19, kanamycin antibiotic resistance, characterization 1520.
Pseudomonas aeruginosa, genes antibiotic resistance 1544.
 purification methodology 3510.
 purification, ultracentrifugation 3553.
 Rhizobiaceae, association, host range, host plants cell recognition 5937.
 Rhodococcus erythropolis, association, conversion, scleroel, abienol 8437.
 role, antibiotic resistance, bacteria 6017.
 role, antibiotic resistance, gentamicin, methicillin, *Staphylococcus aureus*, Eire hospitals isolates 7032.
 role, Enterobacteriaceae, enterotoxins biosynthesis 8524.
 role, *Escherichia coli* enterotoxins biosynthesis, association eukaryotes adenylate cyclase activation 7642.
 role, Streptomyces venezuelae chloramphenicol biosynthesis 8857.
 role, trimethoprim resistance transfer, *Escherichia coli* 6028.
 Salmonella, epidemiology, salmonellosis, man, beef food contamination 8472.
 Salmonella krefeld, role, cotrimoxazole drug resistance 3278.
 Salmonella, trimethoprim drug resistance 4277.
 SCF2 plasmid mediated antibiotics biosynthesis, stability, Streptomyces bicolor 1621.
 Shigella flexneri, antibiotic resistance, clinical isolates 4280.
 Staphylococcus aureus, antibiotic resistance, gentamicin, methicillin 6019.
 Staphylococcus aureus clinical isolates, role, antibiotic resistance, Australia 7029.
 Streptomyces fradiae, neomycin biosynthesis 6160.
 Ti plasmid, Agrobacterium tumefaciens, crown gall, genetic engineering 5788.
 Ti plasmid, Agrobacterium tumefaciens, DNA analysis, Nicotiana tabacum crown gall 7690.
 Ti plasmid, Agrobacterium tumefaciens, infection, plants, gene transfer 4922.
 Ti plasmid DNA, detection methodology, Agrobacterium tumefaciens 9980.
 transfer, aminoglycoside antibiotics, antibiotic resistance, Staphylococcus 7046.
 transfer, nitrogen fixation, bacteria, conferenes 5452.
 transfer, Staphylococcus antibiotic resistance, aminoglycoside antibiotics 7042.
 transfer, Staphylococcus aureus antibiotic resistance, relationship phage typing 8721.
 trimethoprim drug resistance mechanisms, bacteria, clinical isolates 5999.
 virulence, Agrobacterium rhizogenes, transfer methodology, R factors use 4488.
- Plasmidophora brassicae**,
 clubroot, Brassica 2212.
 clubroot, Brassica oleracea, Brassica rapa, disease resistance breeding 9477.
 clubroot, calcium carbonate, effects on, pathogenesis, Cruciferae 4255.
 clubroot, crop fields, calcium sulfate, sodium carbonate, calcium carbonate effects on 314.
 clubroot, Cruciferae, role, 3-indolylmethylglucosinolate conversion 5761.
 clubroot, disease control, foliar applications, herbicides, Brassica oleracea 8632.
 clubroot, pathogenicity, Cruciferae 2211.
 clubroot, role zoospores, Brassica campestris 4998.
 disease resistance, evolution, Brassica oleracea var botrytis 8861.
 infection, Brassica chinensis, soil moisture, effects on 2216.
 infection, vegetables, plants, disease control 2287.
- Plasmodium falciparum**,
 clinical isolates, ketoconazole, derivatives, antifungal activity 1566.
 malaria, man, bredinin antimalarial activity 1589.
- Plasmodium haletodii**,
 disease resistance, Helianthus annuus 4066.
 downy mildew, effects on, metabolism, Helianthus annuus 3987.
 downy mildew, Helianthus annuus 4066.
 downy mildew, stimulation, phenylalanine ammonia-lyase kinetics, Helianthus annuus 9405.
- Plasmopara helianthi**,
 downy mildew, Helianthus annuus, disease control, metalaxyl 1418.
- Plasmopara obducens**,
 infection, Impatiens, amino acids, \pm Meloidogyne incognita infection 2205.
- Plasmopara viticola**,
 downy mildew, fungicides resistance, measuring techniques, in vitro, Vitis vinifera 7890.
 downy mildew, growth, tissue culture, Vitis vinifera 1289.
- Plastica**,
 adherence, bacteria 3492.
 coatings, plant protection, fungi infection, Sorghum bicolor, Zea mays, Tricicum aestivum 4071.
 culture systems, microwave radiation sterilization, bacteria 708.
 food packaging, association, microorganisms contamination 1094.
- Platanus**,
 bark necrosis, Gnomonia platani, Cylindrocarpum heteronema 6920.
- Platanus occidentalis**,
 pathogenicity, leaf scorch, gram-negative bacteria 9515.
 seedlings, vesicular-arbuscular mycorrhizas, phosphate uptake 9503.
- Platanus racemosa**,
 Microsphaera alni, leaves lesions, measuring techniques, computer applications, video image analysis 4924.
- Platyntoa idaeusalis**,
 larvae, Bacillus thuringiensis subsp. kurstaki toxicity, association formaldehyde dietary intake 7498.
- Pleospora herbarium**,
 leafspot, Simmondsia californica, pathogenesis, new records 8578.
- Pleospora infectoria**,
 fruit rot, Lycopersicon esculentum, extracellular enzymes effects on pathogenesis 4015.
- Pleospora valesiaca**,
 plants diseases, new records, New Zealand 3899.
- Plesiomonas**,
 feces isolation, media (culture) 9896.
- Plesiomonas shigelloides**,
 isolation, food 3824.
- Pleural fluid**,
 animals, bacteria recovery, media methodology 3609.
- Pleurotus cystidiosus**,
 nucleic acids levels, mushroom poisoning relationship 1961.
- Pleurus aestivus**,
 biodegradation, straw 5587.
 + Erwinia carotovora, culture, effects on, nutritive value, Triticum aestivum, straw, Ruminantia 254.
 lignin, biodegradation 5598.
 protoplasts formation, methodology 8166.
- Pleurus asai-calu**,
 nucleic acids levels, mushroom poisoning relationship 1961.
 spores packaging, sterilization 4516.
- Podia interpercutella**,
 pest control, captan, compatibility, Bacillus thuringiensis, stored products 7495.
 pest control, captan, compatibility, Bacillus thuringiensis, stored products 8351.
- Poldy**,
 Aureobasidium pullulans, effects on radioresistance, U.V. radiation 2395.
- Plowing**,
 effects on, soil, enzymatic activity 4216.
- Plum pox virus**,
 elimination, menstem tip culture, Prunus domestica 2246.
- Pneumonia**,
 cattle, animal isolates, anaerobic bacteria, susceptibility, antibiotics 7987.
 Enterobacteriaceae isolates, man, antibiotic resistance 1537.
- Poa**,
 blight, Sclerotium rolfsii, disease control, fungicides, salts, Trichoderma 1402.
- Poa annua**,
 blight, Basidiomycetes 1172.
- Poa pratensis**,
 blight, Basidiomycetes 1172.
 leaves senescence, Drechslera sorokiniana leafspot, herbicides effects on pathogenesis 9387.
 pathogenicity, Rhizoctonia zeae 5701.
 roots, adhesion, Klebsiella pili, purification, characterization 8660.
 sugars, amino acids, Drechslera sorokiniana pathogenesis, herbicides effects on 5718.
- Poaceae**,
 rust, incidence, Africa, East 9365.
- Poa tet**,
 Arachis hypogaea, Pythium mycelium, metham sodium disease control 1411.
 Phaseolus vulgaris, Botrytis cinerea spores dispersal, incidence 5686.
- Podophyllum peltatum**,
 extracts, antiviral activity 6071.
- Podosphaera leucotricha**,
 powdery mildew, disease control, fungicides, Malus pumila 2281.
 powdery mildew disease control, greenhouses plants, actaconazole treatment 5004.
 powdery mildew, fungicides, disease control, Malus pumila 2280.
 powdery mildew, malus, disease control 4113.
 powdery mildew, Malus, disease resistance 7739.
 powdery mildew, Malus domestica, temperature effects on buds 1211.
 powdery mildew, Malus pumila, dormancy, fungicides treatment 1398.
- Podospora anserina**,
 emetine resistance, association ribosomal proteins 3274.
- Poinsettia cryptic virus**,
 elimination, Euphorbia pulcherrima, suspension culture 4037.
- Poinsettia mosaic virus**,
 elimination, Euphorbia pulcherrima, suspension culture 4037.
 infection incidence, Euphorbia pulcherrima, Canada 5014.
- Poissoning**,
 cattle, Baccharis cordifolia, uptake, mycotoxins 2944.
- Poly(3-L- α , β -diaminopropionic acid)**,
 synthesis, antiviral activity, Newcastle disease virus 4315.
- Poly(2-methyl-5-vinylpyridine N-oxide)**,
 role, tobacco mosaic virus multiplication inhibition, Nicotiana glauca
 protoplasts 6582.
- Poland**,
 milk production, contamination, microorganisms 4785.
- Poly(anions)**,
 inhibition α -amylase, dextranase, kinetics, fluorescence, Bacillus subtilis 79.
- Polar environments**,
 lakes, acids effects on plant debris biodegradation, microorganisms 1995.
 lakes, microorganisms succession, leaf litter decay 1061.
- Polarography**,
 cytochrome c3, Desulfovibrio 8192.
 subtilisin subtilisin inhibitor complex dissociation, Streptomyces 6518.
 zinc binding alcohol dehydrogenase, yeasts 6496.
- Poly(ethylene)**,
 soil mulches, effects on Sclerotium oryzae sclerotia 1513.
- Poly(glutamic acid)**,
 biosynthesis, genetic control, Bacillus subtilis 911.
- Poly(hexamethylene biguanide hydrogen chloride)**,
 antibacterial activity, use biocides, food industry 2450.

- Poliiovirus**,
adsorption, filters, salts effects on 3469.
adsorption, sand, days 7802.
antibodies, detection, radioimmunoassays 1758.
antiviral agents, D-arabinofuranosyl derivatives 3342.
assays, use, immunoelectron microscopy 4476.
bioaccumulation, *Crassostrea virginica*, *Crassostrea gigas*, *Mercenaria mercenaria*, polluted environments 1711.
contamination, crops, leaves, recovery methodology 1767.
desinfectants antiviral activity, efficacy, gel filtration methodology 9694.
disinfection, antiviral activity, chlorine, chlorine dioxide, iodine, bromine chloride 2468.
herbs, infusion, antiviral activity 7950.
hygromycin B, antiviral activity, HeLa cells 7947.
incubation, ammonia role, heat effects on 7945.
incidence, sewage, Czechoslovakia 3460.
plaque assay, neutralization 6298.
proteins, high-performance liquid chromatography, separation, methodology 8102.
sewage sludge, relationship vaccination, man 3470.
structural proteins, separation, high-performance liquid chromatography 7228.
- Pollivirus 1**,
antiviral activity, 2-amino-5-(2'-N-methyl-sulfamidophenyl)-1,3,4-thiadiazole, derivatives 9693.
enzyme-linked immunosorbent assay 6300.
isolation methodology, estuarine sediments 8106.
ribavirin, antiviral activity 7948.
synthetic compounds antiviral activity 6064.
- Pollen**,
germination, *Beta vulgaris*, beet mosaic virus, beet yellows virus infection effects on 2163.
Lilium longiflorum, aflatoxins bioassays, use 5641.
localization, necrotic ringspot virus, enzyme-linked immunosorbent assay, *Prunus* 2148.
Luffa acutangula, effects on, spore germination, *Pseudoperonospora cubensis*, downy mildew 5011.
Lycopodium lycopersicum, antifungal activity, *Alternaria alternata*, *Helminthosporium oryzae* 8605.
ornamental plants, airborne particulates, association fungi distribution 7705.
Prunus, *Prunus* necrotic ringspot virus localization 1219.
Zea mays, enhancement, *Colletotrichum lindemuthianum* infection, inhibition, cowpea mosaic virus infection, *Vigna unguiculata* 327.
- Pollination**,
Pennisetum americanum, effects on, smut, *Tolyposporium penicillariae*, pathogenesis 6777.
- Pollutants**,
relationship, wastewater treatment 5330.
soil, microorganisms metabolites, phytotoxicity, *Cucumis sativa* 4193.
- Polluted environments**,
poliovirus bioaccumulation, *Crassostrea virginica*, *Crassostrea gigas*, *Mercenaria mercenaria* 1711.
- Pollution**,
effects on, lead, soil properties, humus, enzymatic activity, metabolism 2326.
water, microorganisms 1713.
- Pollution detection**,
methodology, water pollution, microbial contamination, fecal microflora, membrane filtration 2626.
water pollution, microbial pollution, enterovirus, *Perna canalicula* 3516.
- Pollution effects**,
acid rain, \pm cadmium, \pm zinc, viability, soil microorganisms 9509.
acid rain, *Glomus fasciculatus* stimulation heavy metals uptake, *Ehrharta calycina* 7805.
acid rain, soil microorganisms, leaf litter decomposition, nutrient availability, sulfur 9507.
climate change, plant diseases, mortality, forests 6926.
ozone, *Glomus fasciculatus* growth, *Lycopodium obscurum* roots exudates 7811.
roads salts, enzymatic activity, soil microorganisms 7801.
- Pollution indicators**,
bacteria, removal, waste treatment methodology 2610.
Pisces intestinal microflora bacteria, water pollution, Iran 1725.
sewage, urease activity, beaches 3180.
- Pollution levels**,
microbial pollution, sewage effluents 1712.
microbial pollution, water quality 1721.
- Pollution monitoring**,
microbial pollution, phages, ground water, tracers 3479.
microbial pollution, surface water, methodology, *Salmonella* 8117.
sewage effluents, biological oxygen demand, algae 2614.
sewage treatment plants, *Spirillum volutans* 3464.
- Poly(11-benzyl-4-vinylpyridinium bromide)**,
removal, bacteria, water treatment, methodology 9046.
- Poly(I) poly(C)**,
 \pm cyclic AMP \pm cyclic GMP, activation, defense mechanisms, *Nicotiana glutinosa* glycoproteins, viruses infection 3136.
- Poly(vinyl alcohol)**,
use, immobilization, *Penicillium funiculosum*, cellulase, β -D-glucosidase, exo-cellulohydrolase 8315.
- Poly- β -hydroxybutyric acid**,
biosynthesis, *Azospirillum brasilense* continuous culture, oxygen tension effects on 2749.
- Poly- β -hydroxyalkanoate**,
Bacillus megaterium, purification, characterization 2846.
- Poly- β -hydroxybutyric acid**,
bacteria, assays methodology 4498.
- Polyacetylenes**,
accumulation, *Bidens pilosa* tissue culture, *Pythium aphanidermatum* culture filtrates 5754.
- Polyacrylamide**,
Desulfotribio, oil contamination, polyacrylamide 5141.
gels, β -D-galactosidase immobilization 9176.
- Polyacrylamide, (continued)**
polymerization, *Alicycogenes faecalis* immobilization 9970.
- Polyacrylic acid**,
effects on *Sporotrichum pulverulentum* lignosulfonates biodegradation 6643.
- Polyalthia longifolia**,
leaves, extracts, antimicrobial activity 6084.
- Polyamines**,
biosynthesis, *Clostridium thermohydrosulfuricum* 9205.
stimulation ornithine decarboxylase inhibitor activity, *Physarum polycephalum* 81.
Thermus thermophilus, structure, characterization 8194.
- Polyanions**,
effects on tobacco mosaic virus inoculation, infection, *Nicotiana tabacum* 4969.
- Polyarthritis**,
Ross River virus, immunoglobulin M serum levels, enzyme-linked immunosorbent assay detection, man 9834.
- Polyations**,
effects on tobacco mosaic virus inoculation, infection, *Nicotiana tabacum* 4969.
- Polycyclic aromatic hydrocarbons**,
biodegradation, composting 2875.
- Polydeoxyribonucleotide synthetase (ATP)**,
phase T4, immobilized enzymes, DNA fragments ligation 2755.
- Polyelectrolytes**,
 β -D-galactosidase complex, effects on kinetics, *Escherichia coli* 8256.
- Polyene antibiotics**,
amycin, purification, characterization, *Streptomyces* 8017.
 \pm amphotericin B, antifungal activity, *Candida albicans* 1633.
antibiotic sensitivity testing, bacteria, growth zones relationship time 2520.
antibiotic 315, *Gluconobacter biosynthesis*, antibacterial activity, antifungal activity 2570.
antifungal activity, *Candida albicans*, association endocarditis 7935.
antimicrobial activity, mechanisms 9725.
Gluconobacter, biosynthesis, screening 2571.
inactivation, association, growth inhibition zones, mathematical models 6104.
inactivation, mechanisms 2596.
- Polyether antibiotics**,
antibiotic X-14689, biosynthesis, *Nocardia* 6208.
- Polyethylene**,
packaging, milk products, oxygen permeability, spoilage, yeasts, fungi 4884.
- Polyethylene glycol**,
antibacterial activity 8774.
biodegradation, *Pelobacter venetianus* sp. nov. 6645.
Methanobacterium, desulfotribio, biodegradation 8430.
turbidity, detection hepatitis B surface antigen antigen-antibody complexes 826.
- Polyethyleneimine**,
use, immobilization, *Brevibacterium flavum*, association, malic acid production, fumarate hydratase activity 4494.
- Polygala paniculata**,
witches' broom, mycoplasma-like organisms, disease transmission, *Orosius lotophagorum* nyukyuensis 9424.
- Polygalacturonase**,
Aspergillus niger, sugar hydrolysis 4664.
biodegradation, leaf litter, *Hyphomycetes* 2003.
biosynthesis, *Penicillium*, *Fusarium*, extracellular enzymes 1922.
Citrus sinensis soft rot, *Aspergillus aculeatus*, *Botryodiplodia theobromae* 3965.
Clostridium thermosulfurogenes, pectinesterase 4660.
fungi, use, oranges, extraction, oils, protein 8483.
isozymes characterization, *Erwinia atroseptica* 8547.
Kluyveromyces marxianus, characterization 8244.
post-harvest decay fungi 5528.
Sclerotinia sclerotiorum, purification, characterization, role pathogenicity 946.
Trichoderma longibrachiatum, production, carbon sources effects on 3678.
Trichoderma reesei, biosynthesis, activity 8308.
Xanthomonas campestris secretion, carbon sources effects on 5508.
- Polygalacturonase trans-eliminase**,
Xanthomonas campestris secretion, carbon sources effects on 5508.
- Polyglutamic acid**,
biosynthesis, acridine orange effects on, *Bacillus subtilis* plasmids 1846.
- Polygodial**,
antifungal activity, biosynthesis, *Pseudowintera colorata* 688.
repellents, *Myzus persicae*, vectors, virus, plant diseases 459.
- Polygonum aviculare**,
allelopathy, phytotoxins, *Cynodon dactylon*, *Azotobacter*, *Rhizobium* 8683.
- Polyhexamethylene biguanides**,
antibacterial activity, cytoplasmic membranes damage, *Escherichia coli*, structure-activity relationships 7063.
- Poly(10-polyglutamate synthetase**,
purification, characterization, *Corynebacterium*, *Lactobacillus casei*, *Streptococcus faecalis*, *Neurospora crassa* 67.
- Polymerization**,
gels, immobilized cells, immobilized enzymes 9008.
radiation, use, *Trichoderma reesei* immobilization 7262.
- Polymers**,
effects on, *Saccharomyces cerevisiae*, ethanol fermentation yield 5573.
production, *Klebsiella aerogenes*, coating, methodology 2670.
solutions, use, pharmaceuticals extractions, microorganisms growth association 5345.
yeasts adsorption, immobilized cells, ethanol production 7521.
- Poly(10-methyl galacturonase**,
Xanthomonas campestris secretion, carbon sources effects on 5508.
- Poly(10-methyl galacturonase**,
post-harvest decay fungi 5528.
- Polymyxa betae**,
ultrastructure, beet necrotic yellow vein virus vectors, *Beta vulgaris* soil-borne diseases 363.
- Polymyxa graminis**,
ultrastructure, wheat mosaic virus vectors, *Triticum aestivum* soil-borne diseases 363.
- Polymyxin**,
antibacterial activity, *Chlamydia* 9714.
antibiotic resistance, membrane proteins, envelopes, *Pseudomonas aeruginosa* 2414.
antibiotic resistance, plasma membranes fatty acid composition, *Pseudomonas aeruginosa* 7040.
antibiotic resistance, *Pseudomonas aeruginosa*, association, outer membranes membrane permeability 632.
antibiotic sensitivity testing, *Yersinia pestis*, mutants 6174.
 \pm erythromycin 1787.
Pseudomonas aeruginosa antibiotic sensitivity testing 7068.

Polymyxin, (continued)

resistance, association, *Pseudomonas aeruginosa* outer membranes, protein composition 663.
Salmonella clinical isolates, antibiotic sensitivity testing 6112.
susceptibility, association, coagulase, *Staphylococcus*, strains 8866.

Polymyxin B,

antibiotic resistance, *Pseudomonas aeruginosa* 7023.
antibiotics sensitization, *Escherichia coli*, *Salmonella typhimurium* 7158.
+ EDTA + trimethamine, antibacterial activity, *Escherichia coli* 8765.
effects on ions permeability, *Escherichia coli* 758.
effects on, *Salmonella typhimurium* outer membranes 7159.
loss, media (selective), *Vibrio parahaemolyticus*, seafood 222.
+ midcamycin, antibiotic synergism, antibacterial activity, *Pseudomonas aeruginosa* 1669.
reaction, lipopolysaccharides, cell walls, bacteria, identification, methodology 1790.
resistance, relationship, cations effects on protein H1 biosynthesis, *Pseudomonas aeruginosa* envelopes 5158.

Polymyxin M,

antibiotic sensitivity testing, *Pseudomonas aeruginosa* 1600.
+ ethionium, antibacterial activity, *Pseudomonas aeruginosa*, clinical isolates 2523.

Yersinia pestis antibiotic sensitivity testing 6110.

Polyma virus,

antiviral activity, quaternary ammonium compounds 1571.
infected cells, RNA transcription, actinomycin D resistance 3306.

Polymyxin D,

effects on *Candida albicans*, *Cryptococcus neoformans*, growth, morphology 7170.

Polyoxyethylene sorbitan monooleate,

esterase, hydrolysis, *Mycobacterium smegmatis*, purification, characterization 8265.

Polyporus versicolor,

biodegradation, carbohydrates, straw 8442.
laccase, fluorescence, phosphorescence 7366.
laccase, Raman spectroscopy 9148.
treatment, pulp, effects on paper 896.

Polyribonucleotide synthetase(ATP),

use, tRNA labelling, phase T4 9660.

phase T4, use RNA fluorescent probes, biotin labelling 9633.

Polyribonucleotides,

antiviral activity, Semliki forest virus, chick embryos 1578.

Polysaccharides,

Acetobacter calcoaceticus, extracellular levels, association emulsification activity 1949.

Actinomycetes viscosus, biochemical characteristics 2817.

Agrobacterium radiobacter, carbohydrate composition, seed treatments, inhibition damping-off, *Pythium ultimum*, *Beta vulgaris* 7710.

antigen O, biosynthesis, *Salmonella anatum* UDPgalactose 4-epimerase deficient mutant, synthetic galactosyl fucaprenyl diphosphate intermediates 7440.

antitumor activity, *Poria cocos* 7446.

Aureobasidium pullulans, production, batch culture, association, ammonium concentration 6570.

Bacillus oligonitrophilus, assays, mathematical models 8126.

bacteria, applications, industries, reviews 9200.

Basidiomycetes, antitumor activity, mice 7453.

biosynthesis, carbohydrate composition, thermophilic bacteria 6573.

biosynthesis, *Hyphomicrobium*, methanol utilization 3709.

biosynthesis, *Salmonella* 4703.

biosynthesis, *Xanthomonas campestris*, extracellular polymers, media (culture) 2682.

capsules, *Haemophilus influenzae*, association cotrimoxazole tolerance 1562.

capsules, *Rhizobium japonicum*, role modulation, *Glycine max* 3237.

carbohydrate composition, antitumor agents, *Microellobasporia grisea* 6587.

carbohydrate composition, *Rhizobium meliloti* 6574.

cell walls, 2,3-diamino-2,3-dideoxyglycolic acid biosynthesis, characterization, *Propionibacterium acens* 3657.

characterization, bacteria, intertidal environment 7443.

decomposition, soil microorganisms, glucose radioactive labelling 1474.

degradation, *Ampelomyces quisqualis*, enzymes detection 8319.

effects on triacylglycerol lipase biosynthesis, *Pseudomonas aeruginosa* 1945.

extracellular, carbohydrate composition, *Streptococcus mutans*, *Streptococcus sanguis* 8326.

extracellular polymers, *Agrobacterium tumefaciens*, *Agrobacterium radiobacter*, structure 9196.

extracellular polymers, biosynthesis, *Methylobacterium* 9189.

extracellular polymers, microorganisms biosynthesis, reviews 1951.

extracellular polymers, production, *Alcaligenes faecalis* var. *myxogenes* 3712.

extracellular polymers, *Rhizobium meliloti*, characterization 9193.

Haemophilus influenzae, capsules, carbohydrate composition, N.M.R. 7438.

Haemophilus influenzae, cattle serum albumin conjugate, hydrodynamics, light scattering 978.

Hyphomicrobium, extracellular polymers, carbohydrate composition 3710.

in vitro biosynthesis, phytotoxicity, *Colletotrichum trifolii* 353.

Klebsiella capsules, oligosaccharides purification 8335.

Klebsiella capsules, structure 9197.

Leptospira cell walls, ultrastructure 8330.

Microellobasporia grisea, preparation, characterization, antitumor activity 8346.

Microellobasporia grisea, antitumor activity 4707.

Microellobasporia grisea, carbohydrate composition, antitumor activity, Ehrlich ascites tumor, rats 6586.

microorganisms, activity, bioreactors, mathematical models 1064.

microorganisms cell membranes, uronic acid bioassays 5365.

Neisseria meningitidis capsules, structure 4701.

Pseudomonas blooms, rheology, conformation 6581.

Pseudomonas, extracellular, companion gels 980.

Rhizobium meliloti, radioassays 3589.

Rhizobium, structure 4704.

Salmonella anatum, enzymatic synthesis 8331.

Shigella dysenteriae, carbohydrate composition, immunochemistry 7439.

side chains, *Yersinia pseudotuberculosis* lipopolysaccharides, structure 6588.

O-specific, *Serratia marcescens*, structure 4702.

Sporothrix schenckii, structure 1782.

Streptococcus group B, anti immunoglobulin G, enzyme-linked immunosorbent assay 5392.

Streptococcus group B, isolation, chemical composition 8334.

Polysaccharides, (continued)

Streptococcus pneumoniae capsules, structure 6579.

Streptococcus pneumoniae capsules, structure 9195.

Streptomyces, purification, characterization 2820.

structure, *Klebsiella antigen O* 8329.

structure, *Rhizobium*, capsules, extracellular 7437.

sulfur, carbohydrate composition, *Arthrobacter* 2818.

toxoids, *Neisseria meningitidis*, immunochemistry, enzyme-linked immunosorbent assay 4430.

Yersinia pseudotuberculosis, structure 9199.

Polyecias fruticosas,

foliar diseases, blight, *Alternaria panax* 3090.

Polyphondylium purpureum,

ecological distribution, population density, forest floor 5849.

Polyphondylium violaceum,

acrasin, structure 7294.

ecological distribution, population density, forest floor 5849.

Polystyrene,

substrates, bacteria cell adhesion, measuring techniques, use, bioluminescence 4488.

Polythiazole,

containing peptide antibiotics, characterization, reviews 1682.

Polyvinylpyrrolidone,

+ Tween media (culture), *Leptospira interrogans* growth 9031.

Poncirus trifoliata,

x *Citrus sinensis*, roots exudates effects on spore germination, *Glomus* epigaeum 1477.

Ponds,

isolation, air-water interface, aquatic microorganisms, scanning electron microscopy, observation techniques 8088.

Pongamia glabra,

extracts, antifungal activity 1570.

Pools,

treatment, +U.V. radiation, microflora, incidence, *Naegleria*, hospitals 798.

Population changes,

bacteria soil microorganisms, *Fagus sylvatica* forests, clear cutting, *Picea abies* replacement 7779.

Population decline,

mycorrhizas, nitrogen fertilization effects on, *Pinus sylvestris* 3163.

Population density,

bacteria, soil, Pahokee muck, species diversity, respiration, enzymatic activity 5912.

ectomycorrhizas, forests, fertilizer applications, *Fagus sylvatica* 8649.

rhizosphere microorganisms, prometryne, trifluralin, roots exudates effects on, *Gossypium hirsutum* 8706.

Population dynamics,

bacteria, waste treatment, animal wastes, lagoons 4434.

Basidiomycetes, decomposition, roots, wood, *Quercus robur* 5861.

fungi, association, heavy metals gradients, soil, Sweden 6898.

Fusarium udum, sawdust soil amendment effects on 3252.

Pythium ultimum, growth, soil, water potential 4228.

rust, *Uromyces appendiculatus*, interspecific relationships, *Verticillium lecanii*, *Phaseolus vulgaris* 2108.

Saccharomyces cerevisiae, batch culture, quality control 3818.

Saccharomyces cerevisiae, growth, reactors, mathematical models 3633.

soil microorganisms, moulds, *Isoplera*, Kenya 8669.

soil, microorganisms, Saudi Arabia 2352.

soil, microorganisms, soil analysis, methodology 4224.

yeasts, isolation, trees exudates 2295.

Population ecology,

host plants, vesicular-arbuscular mycorrhizas, ectomycorrhizas, ecophysiology, nutrient transport, absorption 9539.

pathogens, limiting factors, plant diseases 5698.

Population genetics,

Cronartium quercuum f.sp. *fusiforme*, *fusiform* rust, virulence, disease resistance, *Pinus* 6913.

Zea mays, downy mildew resistance, germplasm, *Peronosclerospora sorghi* 8626.

Population growth,

Brachyrium plicatus, association, *Saccharomyces cerevisiae* nutritive value, nutrients supplements 7604.

wastewater treatment ponds, symbiosis, algae, bacteria 2605.

Population levels,

bacteria, population ecology, activated sludge 4439.

cell numbers, viability, population ecology, bacteria, activated sludge 4440.

fungi species composition, leaf litter, forests, tropical environment 1443.

soil microorganisms, human impact trampling, forests 4133.

soil microorganisms, leaf litter decomposition, forests 5855.

soil microorganisms, slash and burn 9622.

Population structure,

Heliothis zea nuclear polyhedrosis virus effects on, pest control, *Heliothis* 104.

Phytophthora infection, *Theobroma cacao*, *Hevea brasiliensis*, *Mangifera indica* 477.

Population studies,

antibiotic resistance, *Escherichia coli*, *Enterobacter cloacae* 629.

bacteria, biofilms, wastewater treatment 5300.

soil microorganisms, forests, spatial distribution, *Tricholomopsis platyphyla* 1444.

Populations,

Corynebacterium, soil pH effects on, relationship, *Fusarium oxysporum* f.sp. *apii*, yellows, *Apium graveolens* var. *duice* 5748.

soil microorganisms, N-(phosphonomethyl) glycine effects on 620.

Popula,

biomass, silviculture, mixed culture, interaction *Alnus rubra*, nodulation, nitrogen fixation 9512.

ectomycorrhizas association, incidence, USA, Iowa 5851.

exudates, yeasts isolation, identification, host specificity, population dynamics 2295.

isolates, potyvirus infection, plants, pathogenicity 316.

leaf rust, *Metarhizium meduseae*, photoperiod, effects on, pathogenesis 6930.

leaves culture, *Populus* growth, benzimidazole effects on 6880.

lignin, fungi, biodegradation 6652.

Marssonina brunnea infection, pathogenesis 549.

rust, epidemiology, Canada 4170.

Populus alba,

ectomycorrhizas association, incidence, USA, Iowa 5851.

- Populus deltoides**, infection, *Melampsora medusae* races, sensitivity, light intensity, temperature 6817.
leaf rust, *Melampsora medusae*, (temperature, role, disease resistance 6911.
Melampsora medusae infection, isolates temperature tolerance 2206.
- Populus euramericana**, leaf rust, *Melampsora medusae*, temperature, role, disease resistance 6911.
- Populus grandidentata**, endomycorrhizas association, incidence, USA, Iowa 5851.
- Populus tremuloides**, histopathology, stem canker, *Cytospora chrysospora* 9520.
- Populus tremuloides**, canker, *Hyphoxylon marmatum* 1464.
hydrolysates, use, *Pachysolen tannophilus*, ethanol production 8411.
Hyphoxylon marmatum infection, association, *Magiciada septendecim* wounds 8658.
leaf litter, fungi, biodegradation 8045.
- Populus trichocarpa**, *Pseudomonas syringae* infection, association, frost, symptoms 4173.
- Poria**, post-harvest decay, *Hevea brasiliensis* cellulose, lignins, Malaysia 7791.
- Poria cocos**, polysaccharides, antitumor activity 7446.
- Poria medulla-panis**, saw rot, wood decay, oxygen, carbon dioxide effects on 5084.
- Poria placenta**, lignocellulose biodegradation, comparison, softwoods 170.
wood decay 3177.
wood decay assays, pick test 4182.
wood, decay, indicators, compression pressure tolerance, *Pseudotsuga menziesii* 6535.
- Portulaca**, low molecular weight metabolites, taxonomic significance, evolution 5461.
- Porina**, cell membranes, *Escherichia coli*, *Salmonella typhimurium*, β -lactam antibiotics diffusion 718.
Escherichia coli, membrane permeability, role antibiotic resistance, β -lactam antibiotics 1542.
X-ray diffraction, *Escherichia coli* 6380.
- Pork**, bacteria, food contamination, cooking, kitchens 232.
bacteria, food contamination, temperature effects on 241.
food contamination, *Clostridium perfringens*, *Staphylococcus aureus*, cooking, kitchens 1066.
gases composition, storage, *Lactobacillus*, spoilage 5639.
sausages, *Salmonella* food contamination 179.
- Portulaca oleracea**, association *Hydrangea macrophylla*, tomato spotted wilt virus detection 5016.
black stem, *Dichotomophora portulacae* 9427.
- Post-harvest decay**, antifungal agents fumigants, disease control, *Pseudotsuga menziesii* wood 1468.
apples, cold storage effects on scab pathogenesis 3105.
Aspergillus, *Penicillium*, corn, genetic analysis 9451.
bacteria, fungi, etiology, *Manihot esculenta* 3102.
bagasse, fungi, storage time effects on 5030.
bananas, fungi diseases 1328.
barley, storage, long-term effects, microorganisms 1321.
blueberries, *Alternaria*, *Botrytis*, moisture effects on 5032.
blueberries, fungi infection, disease control, carbon dioxide storage 3106.
Botryosporium longibrachiatum, leaves, *Nicotiana tabacum* 9454.
cantaloupes, fungi, control, use, benomyl + guazinate 6835.
Clostridium, *Erwinia carotovora* subsp. *carotovora*, *Erwinia carotovora* subsp. *atroposeptica*, potatoes 2235.
Colletotrichum gloeosporium, antifungal activity, 1-*oxo-2-hydroxy-4-oxo-heneicos-12,15-diene*, *Persea americana* 2471.
corn, fungi, bacteria, sulfur dioxide effects on 6836.
corn, fungi, fungicides prevention, seeds viability 5029.
cotton, *Aspergillus flavus*, aflatoxins, kojic acid biosynthesis 5648.
Cucumis melo, fungicides effects on 7723.
fungi, disease control, fruits 1327.
fungi, disease control, fungicides, cantaloupes 1399.
fungi, ethylene, effects on, growth 8794.
fungi, kiwifruit 3104.
fungi, prunes 5801.
fungicides, control, *Botryodiplodia theobromae* rot, bananas 5804.
Gliocladium roseum, *Sclerotium rolfsii*, *Aspergillus niger*, apples, pears, peaches, pathogenesis, amino acids, levels 1324.
Gramineae, food contamination, fungi 2236.
grapes, *Botrytis cinerea*, sulfur dioxide fumigation, packaging, temperature effects on 2905.
guavas, disease control, benomyl, guazinate 6832.
Hevea brasiliensis, cellulose, lignins, decay fungi, Malaysia 7791.
iprodione disease control, peaches 4129.
kiwifruit, fungi contamination, USA, California 5031.
lemons, sour rot, disease control, CGA-64251 1322.
Lycopersicon esculentum, *Erwinia carotovora* subsp. *carotovora*, temperature, suspensions depth effects on 1330.
Malus domestica, calcium, effects on, *Penicillium expansum* 8598.
mangoes, *Alternaria alternata* latent infection role 6834.
oranges, green mold, antifungal activity comparison, thiabendazole, sodium orthophenylphenate, CGA-64251 1319.
oranges, *Penicillium digitatum* green mold, imazail treatment 9452.
pears, surfactants, antifungal activity 1323.
Penicillium expansum, calcium chloride, disease control, oranges 5798.
Penicillium italicum, fenpropimorph disease control, oranges 4908.
Phomopsis citri, grapefruits, fungicides disease control, USA, Texas 4049.
Phytophthora citrophthora, brown rot, disease control, metalaxyl, fruits 1419.
Prunus amygdalis, fungal flora, seed composition, water activity, effects on 5803.
Pseudomonas marginalis soft rot, tomatoes, storage conditions 9453.
resistance, citrus, *Penicillium digitatum* wood infection 5802.
Rhizoctonia, *Cylindrocladium pteridis*, *Cylindrocladium heptaseptatum*, pathogenicity, symptoms, *Rumohra adiantiformis* 1326.
Rhizopus nigricans, tomatoes, γ radiation + heat treatments + chemicals control 2237.
Saccharum officinarum fermentation, microorganisms 439.
Sesamum indicum seeds, *Aspergillus niger*, *Alternaria alternata*, proteins levels
- Post-harvest decay, (continued)**
7717.
soft rot, *Erwinia carotovora*, pectinolytic enzymes, oxygen effects on, potatoes 5033.
Solanum tuberosum, storage effects on disease resistance, *Erwinia chrysanthemi* 7721.
storage, *Phoma exigua*, *Canca* fruits 7719.
stored products, sorghum, fungi, effects on growth insecta 5799.
thermophilic fungi, *Theobroma cacao* beans fermentation 8601.
thermophilic fungi, tobacco leaves, association storage 8599.
Trichoderma harzianum, storage, apples 8602.
Trichothecium roseum, rot, potatoes 1325.
Venturia inaequalis infection, apples, factors affecting 437.
wheat, fungi, factors affecting 4054.
wheat, preservatives antifungal activity 441.
yams, *Botryodiplodia theobromae*, spores, vectors, *Mus musculus domesticus*, *Periplaneta americana*, *Zonocerus variegatus* 442.
- Postoperative infection**, man, bacteria, prophylaxis, laminar air flow 3497.
prophylaxis, benzalkonium chloride + oxacillin binding, heart prosthetics, dogs 5343.
- Potassium**, aspartate kinase activation, *Escherichia coli* 6536.
effects on *Oryza sativa*, susceptibility, leaf blight, *Xanthomonas campestris* pv. *oryzae* 6750.
fertilizers content, effects on *Phytophthora nicotianae* var. *parasitica* buckeye rot, *Lycopersicon esculentum* 9445.
nutrient sources, Azotobacter, soil 7823.
nutrient status, mycorrhizas, seasonal variations, Gramineae 1490.
nutrition, effects on Triticum yield 371.
release, Candida, imidazoles effects on plasma membranes 6061.
soil fertility, relationship *Laetisaria fuciformis* infection, *Lolium perenne* 9357.
- Potassium bromide**, inactivation, glucosephosphate isomerase, *Streptomyces phaeochromogenus* 6512.
- Potassium carbonate**, *Aedes aegypti* larvae, effects on biological control, *Bacillus thuringiensis* crystals 4717.
- Potassium chloride**, \pm sodium chloride, cheddar cheese ripening, *Staphylococcus aureus*, growth, enterotoxins biosynthesis 2037.
- Potassium dichromate**, use, measuring techniques, microorganisms biomass oxidation 6287.
- Potassium hydroxide**, Gram stain reaction, methodology, identification, gram-negative bacilli, gram-positive bacilli 9972.
- Potassium permanganate**, effects on vesicular-arbuscular mycorrhizas symbiosis 8671.
use, *Mena coniospora* fixation, conidia germination 4519.
- Potassium phosphate**, effects on, disease resistance, powdery mildew, *Erysiphe graminis*, *Triticum aestivum*, *Hordeum vulgare* 378.
- Potassium sorbate**, + acidity, effects on heat inactivation, yeasts, fruit juices 5636.
antibacterial activity, *Salmonella typhimurium*, poultry 2035.
+ benomyl, disease control, fruit rot, *Ficus carica* 1596.
effects on *Clostridium botulinum* growth 8497.
inhibition *Clostridium botulinum* growth, cured products, meat 3857.
+ *Lactobacillus lactis*, inhibition growth, psychrotrophic bacteria, milk 7579.
resistance, *Penicillium*, cheese isolates 659.
use, *Salmonella* growth inhibition, meat products 3838.
yeasts sensitivity 7053.
- Potassium thiocyanate**, inactivation, glucosephosphate isomerase, *Streptomyces phaeochromogenus* 6512.
- Potato aucuba mosaic virus**, infection, *Cyphomandra betacea*, isolation, physicochemical properties 393.
- Potato leaf roll virus**, antigenic characteristics, infectivity, refrigeration, freezing effects on, *Solanum tuberosum* 9422.
Aphididae disease transmission, *Solanum tuberosum*, USA 6814.
detection, enzyme-linked immunosorbent assay, tubers, *Solanum tuberosum* 9404.
detection methodology, plant cells 4473.
disease spread, Aphididae, *Solanum tuberosum* 2181.
disease transmission, Aphididae, feeding behavior, permethrin, deltamethrin effects on 8526.
disease transmission, *Myzus persicae*, storage conditions, potatoes 7720.
incidence, *Solanum tuberosum* tubers, USA 1245.
infection, *Nicotiana tabacum*, protoplasts, actinomycin D, effects on 7701.
infection, 2,4-dioxohexahydro-1,3,5-triazine + guanine antiviral activity, *Solanum tuberosum* 6886.
inoculation, time effects on, pathogenesis, *Solanum tuberosum* 3084.
isolation methodology, reviews 8100.
Myzus persicae disease transmission, leaves age, *Solanum tuberosum* 2182.
- Potato mop-top virus**, infection, tubers, *Solanum tuberosum* 2173.
- Potato spindle tuber viroid**, disease spread, *Chrysanthemum*, *Lycopersicon esculentum* 5793.
double-stranded RNA, infected *Lycopersicon esculentum* leaves 3044.
infection, *Solanum tuberosum*, epidemiology, Australia 5781.
nucleic acids, extraction methodology, gel electrophoresis 8101.
structure, physicochemical properties, role, plant diseases, reviews 8529.
- Potato virus**, etiology, *Solanum*, purification, characterization 3071.
- Potato virus A**, antigenic characteristics, infectivity, refrigeration, freezing effects on, *Solanum tuberosum* 9422.
mixed infection, detection, use, *Physalis angulata* lesions methodology 2157.
preservation, freeze-drying, dehydration, infectivity 2653.
- Potato virus M**, disease resistance, hybrids, *Solanum gourlayi* \times *Solanum tuberosum* 2247.
disease spread, Aphididae, *Solanum tuberosum* 2181.
disease spread, *Canca*, *Chrysanthemum*, *Lycopersicon esculentum* 5793.
leaves, leaves, tubers, *Solanum tuberosum* 7693.
preservation, freeze-drying, dehydration, infectivity 2653.
purification, methodology 3537.

Potato virus S,

- antigenic characteristics, infectivity, refrigeration, freezing effects on, *Solanum tuberosum* 9422
- Aphididae disease transmission, *Solanum tuberosum*, USA 6814.
- disease spread, Aphididae, *Solanum tuberosum* 2181.
- infection, disease spread, detection, *Solanum tuberosum* 2158.
- infection, ribavirin, treatment, *Solanum tuberosum* 8581.
- infection, +ring rot, effects on *Solanum tuberosum*, yield 1230.
- infection, *Solanum tuberosum*, Canada 4017.
- infection, *Solanum tuberosum*, detection, use, enzyme-linked immunosorbent assay 1242.
- purification, methodology 3537.
- strains, isolation, North America, Aphididae disease transmission, association, *Chenopodium quinoa* 6829.

Potato virus T,

- transmission (seed), *Solanum tuberosum*, symptoms 406.

Potato virus X,

- antigenic characteristics, infectivity, refrigeration, freezing effects on, *Solanum tuberosum* 9422.
- antiviral activity, thiourea derivatives, *Nicotiana tabacum* 8641.
- Aphididae disease transmission, *Solanum tuberosum*, USA 6814.
- disease control, ribavirin, 5-azadihydroacriol, disease resistance 2271.
- disease resistance genes, *Solanum tuberosum* 3119.
- disease resistance, role peroxidase, *Nicotiana tabacum* 2162.
- disease spread, Aphididae, *Solanum tuberosum* 2181.
- distribution, association, infection, weeds 1244.
- eradication, *Solanum tuberosum*, culture, use, ribavirin 1239.
- infection, *Capsicum annuum* 7699.
- infection, *Datura stramonium*, RNA polymerase (RNA-dependent) activity 9374.
- infection, effects on nucleic acids metabolism, *Solanum tuberosum* 2187.
- infection, *Gomphrena globosa*, leaves hypersensitive response 2156.
- infection, *Nicotiana tabacum*, inclusion bodies, induction, structure 1238.
- infection, ribavirin, treatment, *Solanum tuberosum* 8581.
- infection, +ring rot, effects on *Solanum tuberosum*, yield 1230.
- infection, *Solanum tuberosum* cultivars, incidence 9409.
- infection, *Solanum tuberosum*, detection, use, enzyme-linked immunosorbent assay 1242.
- infection, *Solanum tuberosum*, eradication, heat treatments, meristem tip culture use 2155.
- infection, 2,4-dioxohexahydro-1,3,5-triazine+guanidine antiviral activity, *Nicotiana tabacum* 8686.
- multiplication, inhibition ribonuclease leaves, plants 2095.

Potato virus Y,

- antigenic characteristics, infectivity, refrigeration, freezing effects on, *Solanum tuberosum* 9422.
- Aphididae disease transmission, *Solanum tuberosum*, USA 6814.
- disease control, deltamethrin, disease transmission, *Myzus persicae*, *Beta vulgaris* 467.
- disease spread, Aphididae, *Solanum tuberosum* 2181.
- disease transmission, alarm pheromone derivatives effects on, *Myzus persicae* 3108.
- disease transmission, vectors, Aphididae 9400.
- incidence, *Solanum tuberosum* tubers, USA 1245.
- infection, *Capsicum annuum* 7699.
- infection, *Lycopersicon esculentum*, Jordan 6793.
- infection, *Nicotiana tabacum* association, disease resistance, Meloidogyne incognita 9433.
- infection, *Nicotiana tabacum*, epidemiology 4046.
- infection, *Nicotiana tabacum*, relationship disease resistance, Meloidogyne incognita 9432.
- infection, *Solanum tuberosum*, disease spread, control, use, minerals oils sprays 1243.
- infection, *Solanum tuberosum*, eradication, heat treatments, meristem tip culture use 2155.
- mosaic disease, *Capsicum frutescens*, epidemiology 3032.
- preservation, freeze-drying, dehydration, infectivity 2653.
- transmission, *Brachycaudus helichrysi* 4044.
- vectors, *Myzus persicae*, detection, enzyme-linked immunosorbent assay 3517.

Potato yellow dwarf virus,

- density variability, transmission (mechanical), *Nicotiana rustica* 6805.
- Potatoes,**
- gangrene, phoma exigua var. foreata, fungicides, treatment 4055.
 - metabolism, ethanol fermentation, yeasts 5570.
 - post-harvest decay, *Colletotrichum*, *Erwinia carotovora* subsp. *carotovora*, *Erwinia carotovora* subsp. *atroseptica* 2235.
 - post-harvest decay, rot, *Trichothecium roseum* 1325.
 - post-harvest decay, soft rot, *Erwinia carotovora*, pectinolytic enzymes, oxygen effects on 5033.
 - processing, sterilization, packaging 4801.
 - rot, effects on fermentation 8413.
 - spoilage, psychrophilic bacteria, vacuum packaging, nitrogen packaging 4883.
 - storage conditions, potato leaf roll virus disease transmission, *Myzus persicae* 7720.

Potexvirus,

- mosaic disease, *Crotalaria spectabilis* 4981

Potyvirus,

- infection, plants, pathogenicity, *Populus* isolates 316.
- mosaic disease, *Bambusa arundinacea* 5705.

Poultry,

- animal isolates, *Escherichia coli*, drug resistance, antibiotic resistance 1535.
- bacteria contamination, counting methods, factors affecting 190.
- bacteria, food contamination, spoilage, cooking, kitchens 1067.
- carcasses, contamination, *Salmonella* serotypes 8485.
- coliforms isolates, antibiotic resistance 7030.
- cooked, food contamination, *Salmonella* 4807.
- food contamination, *Campylobacter fetus* subsp. *fetus*, most probable number 231.
- food contamination, *Campylobacter fetus* subsp. *jejuni*, incidence 3840.
- food contamination, *Salmonella* 3830.
- food contamination, *Salmonella*, *Campylobacter fetus* subsp. *jejuni* 6663.
- indicator species 6669.
- isolation, *Campylobacter fetus* subsp. *jejuni* 5605.
- isolation, *Campylobacter fetus* subsp. *jejuni*, media (enrichment), temperature, time, pH, effects on 8141.
- isolation, *Yersinia enterocolitica*, media (enrichment) 3566.
- Micrococcus* isolation, radioresistance, environmental effects 202.
- preservation, refrigeration 3859.

Poultry, (continued)

- preservatives, potassium sorbate, butylhydroxyanisole, antibacterial activity, *Salmonella typhimurium* 2035.
 - processing, airborne microorganisms, association, chickens feces 1727.
 - Salmonella* control, radiation treatment, reviews 8481.
 - sausages, starter cultures, Penicillin 3814.
 - spoilage, packaging, cold storage 4881.
 - Staphylococcus aureus* isolates, enterotoxigenicity 206.
- Povidone-iodine,**
- treatment, bacteremia, gingiva, man 815.
- Powder,**
- Bacillus sphaericus*, production, biological control, Insecta 1023.
- Powdery mildew,**
- Anacardium occidentale*, *Oidium anacardii* infection, pathogenesis 421.
 - Begonia*, factors affecting 401.
 - Begonia*, fungicides foliar applications, antifungal activity 1393.
 - Beta vulgaris* 2217.
 - Botrytis cinerea*, propiconazole effects on, *Uncinula necator* 4102.
 - control, *Rosa*, fungicides 5044.
 - Cucumis* stem blight epidemiology, relationship 1248.
 - disease control, benomyl, *Vigna radiata* 1433.
 - disease control, greenhouses plants, ectaconazole treatment 5004.
 - disease control, *Hordeum vulgare*, yield, models 7671.
 - disease resistance, *Hordeum vulgare* varieties, mechanisms 4089.
 - disease resistance, plant breeding, *Zinnia elegans* × *Zinnia angustifolia* interspecific hybridization 7729.
 - effects on photosynthesis, translocation, *Hordeum vulgare* 3931.
 - Erysiphe chiochocarum, disease resistance, *Helianthus* 1278.
 - Erysiphe graminis, calcium nitrate, potassium phosphate, effects on, disease resistance, *Triticum aestivum*, *Hordeum vulgare* 378.
 - Erysiphe graminis, disease resistance, genes, *Triticum aestivum* 2256.
 - Erysiphe graminis, disease resistance, genetic analysis, *Hordeum* 8627.
 - Erysiphe graminis, *Hordeum*, disease resistance, genetic analysis 471.
 - Erysiphe graminis, shading, effects on Gramineae senescence 3956.
 - Erysiphe graminis f.sp. hordei, defense mechanisms, *Hordeum vulgare* 6838.
 - Erysiphe graminis f.sp. hordei, disease resistance, esterase, proteins, *Hordeum vulgare* 4060.
 - Erysiphe graminis f.sp. hordei, disease resistance induction, Erysiphe graminis f.sp. hordei incompatibility races, *Hordeum vulgare* 1362.
 - Erysiphe graminis f.sp. hordei, penetration, coleoptile, *Hordeum vulgare* 3947.
 - Erysiphe graminis f.sp. hordei, translocation, roots growth, water stress, *Hordeum vulgare* 3935.
 - Erysiphe graminis f.sp. hordei, virulence gene frequency, *Hordeum vulgare* 5041.
 - Erysiphe graminis f.sp. hordei, virulence selection, disease resistance genes, *Hordeum vulgare* 8550.
 - Erysiphe graminis f.sp. tritici, disease resistance, *Triticum aestivum* 2263.
 - Erysiphe graminis f.sp. tritici, mutants, virulence, genetic analysis, *Triticum aestivum* 356.
 - Erysiphe graminis f.sp. tritici, *Triticum aestivum*, disease resistance inheritance 9464.
 - Erysiphe graminis, *Triticum*, *Hordeum*, treatment, drug resistance 2126.
 - Erysiphe polygoni, disease resistance, *Lupinus* 9467.
 - Erysiphe polygoni, disease control, fungicides, *Coriandrum sativum* 493.
 - Erysiphe polygoni, disease resistance, genetic analysis, *Beta vulgaris* 4096.
 - Erysiphe polygoni, pathogenicity, *Brassica napus* mixtures effects on 4043.
 - Erysiphe polygoni, sulfur foliar applications, disease control, *Beta vulgaris* 5283.
 - fungicides disease control, *Hordeum vulgare* 9489.
 - fungicides resistance, measuring techniques, *Cucumis sativus* 7888.
 - Hordeum*, disease resistance 482.
 - Hordeum*, disease resistance association leaves developmental stages 483.
 - Hordeum* var. *vulgare* disease resistance, association, age, growth rate, carbohydrate composition, amino acid composition 8587.
 - Hordeum vulgare*, pathogenicity, microscopy, X-ray diffraction 6775.
 - Hordeum vulgare*, simulations, Erysiphe graminis f.sp. hordei 8554.
 - Hordeum vulgare*, spores dispersal, spring, Denmark 2127.
 - Leguminosae, Erysiphe chiochocarum, epidemiology 8536.
 - Leveillula auraria, pathology, *Cucumis sativus* 5776.
 - malus, disease control 4113.
 - Malus domestica*, temperature effects on buds 1211.
 - Malus*, slides preparation 6351.
 - Microspheara diffusa*, Glycine max, USA, Delaware 4934.
 - Nicotiana* disease resistance, plant breeding 1339.
 - Pisum sativum*, antifungal agents, disease control, Erysiphe polygoni 8637.
 - Pisum sativum*, Erysiphe polygoni, sulfur fungicides, disease control 4123.
 - Podosphaera leucotricha*, disease control, fungicides, *Malus pumila* 2281.
 - Podosphaera leucotricha*, disease resistance, *Malus* 7739.
 - Podosphaera leucotricha*, fungicides, disease control, *Malus pumila* 2280.
 - Podosphaera leucotricha*, *Malus pumila*, dormancy, fungicides treatment 1398.
 - Ribes nigrum*, disease resistance, *Sphaerotheca mors-uvae* 7748.
 - Sphaerotheca fuliginea*, biological control, *Ampelomyces quisqualis* hyperparasitism, *Cucumis sativus* 2275.
 - Sphaerotheca fuliginea*, *Cucumis sativus*, susceptibility, pathogenesis 3047.
 - Sphaerotheca macularis*, antifungal agents, disease control, *Rubus idaeus* 487.
 - Sphaerotheca macularis*, *Fragaria* 5007.
 - Sphaerotheca pannosa* var. *rosae*, disease control, *Rosa* 9385.
 - survival, reproduction, *Hordeum* infection 358.
 - Triticum aestivum*, disease control, triadimefon 1422.
 - Vitis vinifera* buds, overwintering 1270.
 - Vitis vinifera*, *Cucumis sativus*, *Triticum*, disease resistance, cultural conditions 2250.
- Pratylenchus,**
- invasion, inhibition, *Thielaviopsis basicola* infection role, *Pisum sativum* 9333.
- Pratylenchus penetrans,**
- infection, *Pinus radiata*, pathogenesis, Australia 8654.
 - interspecific interactions, *Fusarium oxysporum* f.sp. *pisi*, wilt, *Pisum sativum* 1133.
- Precipitation,**
- effects on nodulation, nitrogen fixation, Glycine max 6999.
- Precursors,**
- n-dodecane, dodecanedioic acid biosynthesis, *Candida tropicalis* 14.
- Predation,**
- Cephalophora navicularis* sp. nov., *Adinetia*, soil 9545.
- Predator-prey interactions,**
- Parangrellus redivivus*, nematophagous fungi 9550.
 - Tetrahymena pyriformis*, *Escherichia coli*, attachment, continuous culture 2673.

- Predatory behavior**,
Ensifer adhaerens, soil, characterization, use, phages, monitoring 5090.
- Pregnisolone-17 α -acetate**,
hydrocortisone-17 α -acetate conversion, Flavobacterium dehydrogenans 5529.
- Pregnenolone triacetate**,
conversion hydrocortisone-17 α -acetate, Flavobacterium dehydrogenans, Curvularia lunata 5529.
- Phenolate dehydrogenase**,
localization, chorismate mutase sites, Escherichia coli 5487.
- Phosphatation**,
bacteria, urine, methodology 3618.
C-type virus infectivity, freeze-drying 1745.
cold storage food, association lactic acid bacteria 260.
feeds, propionic acid, antifungal activity, fungi, growth, monitoring 1086.
fish products, Wellmeria sebi biodegradation 2045.
isobutyric acid, feeds 5625.
meal products, sorbates, reviews 4873.
microorganisms, culture collections 5363.
potato virus Y, potato virus M, potato virus A, freeze-drying, dehydration, infectivity 2653.
poultry, refrigeration 3859.
propionic acid, isobutyric acid, spoilage fungi 5626.
propionic acid, silage 7601.
spoilage, mycotoxins contamination, fungi, corn 5643.
- Preservatives**,
acetic acid, sodium chloride, essential oils, antimicrobial activity 706.
antifungal activity, wheat post-harvest decay 441.
antimicrobial activity, cosmetics 7965.
association, fruit juices, yeasts heat inactivation 2039.
calcium chloride, tissues color, association, viruses infection, plants 2093.
canned food, emulsifiers antibacterial activity, anaerobic bacteria 255.
control, contamination, bacteria, fungi, antibacterial activity, antifungal activity 4320.
EDTA, lysozyme, seafood 2934.
food contamination, Clostridium botulinum toxins 7637.
food, effects on, Staphylococcus aureus, survival 6683.
food, glycine 271.
hydrogen peroxide, antifungal activity, Candida, contact lenses 709.
inhibition, trimethylamine-N-oxide reductase, Escherichia coli 269.
lauricidin, food contamination, spoilage, meat products 270.
meat products, effects on Staphylococcus aureus thermal injury, recovery 264.
potassium sorbate, butyrylhydroxyanisole, antibacterial activity, Salmonella typhimurium, poultry 2035.
thermal, nose sprays, Pseudomonas cepacia survival 7118.
use, bacteria biodegradation, industries, conferences 4755.
wood, soil, microorganisms biodegradation, land disposal, reviews 5985.
- Pressure**,
acetylene, effects on nitrification, soil 617.
isolation, Bacillus spores 5417.
oxygen, ethanol biosynthesis, Candida utilis growth, fermenters 138.
tablets, effects on microorganisms, contamination 3459.
wastewater treatment, films, effects on filters 4443.
- Primaquine**,
acetylation, Streptomyces rimosus, Streptomyces roseochromogenus 7458.
- Primary production**,
pumpkin mosaic virus, effects on, Cucurbita maxima 2196.
Vigna sinensis, cowpea mosaic virus infection effects on 7649.
- Prunus persica**,
pathology, fruit rot, Phomopsis mali 2145.
- Pristane**,
conversion pristanol, Nocardia 5994.
metabolism characterization, Nocardia, pristanol biosynthesis 4720.
- Pristanol**,
biosynthesis, Nocardia, pristane metabolism, characterization 4720.
pristane conversion, Nocardia 5994.
- Pristinamycin**,
antibacterial activity 8012.
- Probes**,
biomass measuring techniques, fungi, penicillin fermentation 9085.
X radiation, diagnosis methodology, salmonellosis, antibodies labelling 1799.
- Procalcine**,
antibacterial activity 7926.
antibacterial activity, Escherichia coli 6051.
- Prochlorose**,
captain, comparison treatment, Monilinia fructicola infection, Prunus persica benomyl resistance 5719.
- Prochloraz**,
disease control, dry bubble disease, Verticillium fungicola, wet bubble disease, Mycogone perniciosa, cobweb disease, Hypomyces rosellus, Basidiomycetes 6824.
disease control, fungi infection, Agaricus 4118.
Persea gratissima, fungicides, anthracnose, stem rot 6833.
- Proclimidine**,
disease control, grey mold, Botrytis cinerea, Cyclamen graecum 1424.
effects on Monilinia fructicola, growth, sporulation, isolation 2282.
resistance, Monilinia fructicola, infection, Prunus persica, pathogenicity 2278.
- Prodigiosin**,
production, growth conditions, Vibrio gazogenes 5604.
- Progestosterone**,
hydroxylation, immobilized cells, Rhizopus stolonifer 4541.
- Prognosis**,
Dutch elm disease, microorganisms, Ulmus glabra, Scolytus vectors 1453.
- Prohistiadine decarboxylase**,
conversion histidine decarboxylase, peptides bonds cleavage, Lactobacillus 4595.
- Proinsulin**,
biosynthesis, Bacillus subtilis, immobilized cells 4582.
- Proliferation disease**,
mycoplasma-like organisms, Malus, tetracycline treatment 3023.
- Proline**,
hydroxylation, mutants, Streptomyces griseoviridis, viridigrisein analogs production 8911.
leaves, Oryza sativa, induction, rice tungro virus infection 1157.
- Proline dehydrogenase**,
+1-pyrroline-5-carboxylate dehydrogenase purification, characterization, Pseudomonas aeruginosa 1908.
- Promethazine**,
antibacterial activity 8753.
- Prometryne**,
Fusarium oxysporum, roots exudates, effects on rhizosphere microorganisms, population density 8706.
- Promoters**,
fusion, Escherichia coli lacZ gene, rifampicin effects on gene expression 1626.
- Prospechler**,
effects on soil microorganisms association Glycine max 7862.
metabolism, intestinal microflora, 2-mercapto-N-isopropylacetanilide production 8385.
- Propamocarb**,
disease control, Pseudoperonospora humuli, downy mildew, Humulus lupulus 1403.
use, ornamental plants disease control 5056.
- Propane**,
assimilation, Rhodococcus rhodochrous 628.
gas production, soil microorganisms, soil moisture, nitrate effects on, anaerobic conditions 9567.
production, anaerobic bacteria, cattle feces fermentation 5138.
- Propanol**,
effects on Serratia marcescens endonuclease activity, growth 2460.
requirements, erythromycin production, Streptomyces erythraeus 6171.
- 2-Propanol**,
+chlorhexidine, antibacterial activity 5355.
fermentation, Clostridium beijerinckii immobilized cells 4737.
- Propham**,
inhibition, soil microorganisms growth 3249.
+mediatorbactene, effects on soil microorganisms, nitrogen cycle, cellulose decomposition 7012.
- Prophylaxis**,
bacteria dental disorders, children 811.
bacteria dental disorders, man 809.
bacteria periodontal diseases, oral hygiene, man 1733.
dental disorders, fluoride dentifrices, bacteria 812.
- Propiconazole**,
use, ornamental plants disease control 5056.
- Propiconazole**,
antifungal activity, fungi, staggers, Lolium 2481.
Botrytis cinerea powdery mildew, effects on, Ucinula necator 4102.
disease control, Cladosporium caryigenum scab, foliar application, Carya illinoensis 9496.
- treatment timing, Rhynchosporium secalis leaf blotch, Hordeum, disease control 488.
- Propineb**,
disease control, leafspot, Apium graveolens 4098.
- Propionate**,
pathway, biodegradation, methanogenic bacteria, mixed culture 4748.
- Propionibacterium**,
clinical isolates, acne, antibiotic resistance 8736.
compound U-57930E antibacterial activity 4379.
continuous culture, pH effects on, biomass, growth rate, extracellular enzymes production 7312.
cyanocobalamin biosynthesis, 5,6-dimethylbenzimidazole effects on 8388.
immobilized cells, thiamin production 4725.
+Lactobacillus, mixed culture, growth 2917.
media (selective) 3598.
medical dressings contamination 8073.
oral cavity isolates, antibacterial activity, metronidazole + spiramycin tablets 8864.
peptidoglycans structure 7442.
- Propionibacterium acnes**,
antibacterial activity, Actinoplanes philippinensis isohematinic acid 8903.
antibacterial activity, benzoyl peroxide 7064.
antibacterial activity, miconazole + imidazole derivatives antibiotic synergism 5182.
antibacterial activity, teichomycin 7183.
cell walls polysaccharides, 2,3-diamino-2,3-dideoxyglucuronic acid biosynthesis, characterization 3657.
clinical isolates, acne, antibiotic resistance 8736.
clinical isolates, antibiotic sensitivity testing 3381.
clinical isolates, incubation, anaerobic environments 2680.
proteinase, isolation, purification, characterization 6529.
recovery, animals, pleural fluid, synovial fluid, media methodology 3609.
- Propionibacterium avidum**,
antibacterial activity, benzoyl peroxide 7064.
cell walls polysaccharides, 2,3-diamino-2,3-dideoxyglucuronic acid biosynthesis, characterization 3657.
- Propionibacterium freudenreichii subsp. shermanii**,
cyanocobalamin production, soybean milk whey carbon sources 5565.
- Propionibacterium granulosum**,
antibacterial activity, benzoyl peroxide 7064.
cell walls polysaccharides, 2,3-diamino-2,3-dideoxyglucuronic acid biosynthesis, characterization 3657.
- Propionibacterium shermanii**,
clinical isolates, acne, antibiotic resistance 8736.
cyanocobalamin biosynthesis, 5,6-dimethylbenzimidazole effects on 8388.
enumeration, cheese 7572.
immobilized cells, nucleotides biosynthesis 113.
use, limes processing industrial wastes, cyanocobalamin production 8391.
- Propionic acid**,
antifungal activity, feeds preservation, fungi, growth, monitoring 1086.
antifungal activity, wheat post-harvest decay 441.
metabolism, kinetics, bacteria, digestion (anaerobic) 8944.
preservation, silage 7601.
preservation, spoilage fungi, corn 5626.
+8-quinolinol treatment, feeds preservation, fungi biodegradation 5630.
treatment, Aspergillus flavus-parasiticus infection, Avena, aflatoxins biosynthesis 311.
Zea mays, fungi infection, effects on growth 6746.
- Propionic acid bacteria**,
activity relationship, milk trace elements 8477.
- β -Propionolactone**,
indirect fluorescent antibody test, Lassa fever virus, Marburg disease virus, Ebola virus 3534.
- Propolis**,
+antibiotics, antibacterial activity, Staphylococcus aureus 6058.
role, Aspergillus sulphureus inhibition, growth, ochratoxin A biosynthesis 9289.

Subject Index

- Propyl gallate**,
antibacterial activity 7084.
antimicrobial activity, *Escherichia coli*, *Staphylococcus aureus*, *Candida albicans* 4319
effects on *Aspergillus*, growth, aflatoxins biosynthesis 5646
- Propiene**,
epoxidation, metabolism, *Brevibacterium*, *Pseudomonas fluorescens*, *Nocardia* 7462.
- Proplyene glycol**,
alginic acid, use, enzymes immobilization 6557.
conversion, pyruvic acid production, *Acinetobacter* 3652.
- Prospira glandulosa**,
nitrogen fixation, nitrogen-fixing bacteria, deserts 3210.
- Prostaglandin synthase**,
inhibitors, thielavin, structure, *Thielavia tericola* 7490.
- Prostaglandins**,
endotoxins association, characterization, bacteria 8515.
inhibition, vaccinia virus, replication, fibroblasts, cell culture 2485.
- Prosthetics**,
heart, benzalkonium chloride+oxacillin binding, postoperative infection prophylaxis, dogs 5343.
- Protamine kinase**,
purification, characterization, *Physarum polycephalum* 1903.
- Protaminobacter ruber**,
carotenoids formation 6624.
carotenoids, purification, characterization 6621.
- Proteea cynaroides**,
leafspot, *Pseudomonas syringae* 6804.
- Proteases**,
penicillins antibacterial activity 5196.
- Protein**,
production, activated sludge, breweries, industrial effluents 8932.
- S-100 Protein**,
measuring techniques, enzyme immunoassay, labelling, *Escherichia coli* β -D-galactosidase use, cerebrospinal fluid, man 857.
- Protein A**,
+ gold, catting, viruses antigens localization 1750.
Staphylococcus, agglutination, assays, rotavirus 8105.
Staphylococcus aureus, solid phase methods, enzyme immunoassay, urine albumin 5307.
- Protein biosynthesis**,
Avicula salvia, crown rust, *Puccinia coronata* f.sp. *avenae* 3952.
Chaetomium cellulolyticum, biodegradation, cell walls, crop residues, *Zea mays* 8418
cytomegalovirus (human), antiviral activity,
9-(1,3-dihydroxy-2-propoxymethyl)guanine, cytomegalovirus (human), cell culture 9688.
erythrophagocytis virus infected ascites tumor cells,
N-phenyl-N'-3-hydroxyphenylthiourea effects on 9684.
Escherichia coli, aminoglycoside antibiotics effects on 6094.
Escherichia coli, aminoglycoside antibiotics inhibition 2558.
Escherichia coli, *Bacillus subtilis*, parabens, effects on 7120.
Escherichia coli, diauxic growth 8215.
Escherichia coli, inhibition, meclizine + nocardicin A 2555.
Escherichia coli, pyrroline-5-carboxylate reductase, gene mapping, purification 1830.
extraacellular, *Streptococcus equisimilis*, temperature effects on 8214.
fungi mixed culture, whiskey distillates wastes 15.
Glycine max, nodules, *Rhizobium japonicum* 7010.
herpes simplex virus 1 infected cells, 9-(2-hydroxyethoxymethyl)guanine effects on 3366.
influenza virus, proteinase, inhibitors, effects on 1583.
Penicillium janthinellum, use, straw 8211.
ribosomes, methanogenic bacteria, antibiotic sensitivity testing 2423.
sulfochloranthine effects on, *Escherichia coli* 2456.
Thermoplasma, biochemical characteristics 9123.
2-thiouracil, effects on, tobacco mosaic virus 5220.
Tinchoderma reesei, use, sugar beets industrial wastes, animals feeds 8493.
vesicular stomatitis virus, antiviral activity, interferon, inhibition 1575.
- Protein composition**,
Arachis hypogaea, Glomus fasciculatus effects on 6949.
association, temperature, yeasts feeds 1087
foams, Saccharomyces cerevisiae, fermentation, wine 3754.
leaves, Cucumis sativus, Vigna sinensis, disease resistance, tobacco necrosis virus 9460.
Mycoplasma capricolum 929.
outer membranes, *Pseudomonas syringae* pv. *syringae*, relationship plant diseases 730.
viruses 730.
- Pseudomonas aeruginosa* outer membranes, association, polymyxin resistance 663.
Staphylococcus, methicillin antibiotic resistance 655.
Staphylococcus, methicillin antibiotic resistance 2407.
tobacco mosaic virus, actinomycin D antiviral activity, infection, Phaseolus vulgaris 8888.
Triticum aestivum, Hordeum vulgare, association, infection, wheat streak mosaic virus, barley stripe mosaic virus 6779.
- Protein H1**,
biosynthesis, cations effects on, *Pseudomonas aeruginosa* envelopes, relationship, antibiotic resistance 5158.
- Protein kinase**,
cyclic AMP binding, kinetics, *Mucor rouxii* 6469.
phosphorylation fructose-bisphosphate, cyclic AMP, fructose-2,6-diphosphate stimulation, AMP inhibition, yeasts 8283
physicochemical properties, kinetics, *Physarum polycephalum* 6460.
- Protein kinase inhibitor**,
purification, characterization, *Saccharomyces cerevisiae* 6408.
- Proteinase**,
Acremonium chrysogenum biosynthesis, nitrogen sources, carbon sources effects on 6140.
activity analysis methodology, Legionella amino acids 7239.
activity, fungi, inhibitors, Bombyx mori 2751.
Aeromonas hydrophila, extracellular enzymes, purification, characterization 2764
Aeromonas hydrophila, production, culture systems effects on 2805
Aeromonas salmonicida, extracellular enzymes, purification 9171.
Aeromonas salmonicida, isolation, purification, characterization 6530.
Aspergillus awamori, immobilization, role, silanes 1860.
- Proteinase (continued)**
Aspergillus nidulans, inhibitors isolation 2812.
Aspergillus nidulans, purification, characterization 6525.
Aspergillus sojae, gelatin hydrolysis, carbon sources, nitrogen sources 8309.
assays, 4-methylumbelliferyl esters substrate specificity analysis 5504
Bacillus subtilis, cheese ripening 4794.
Bacillus subtilis, denaturation kinetics 1891.
bacteria, milk, spoilage, off flavor, milk 4815.
bacteria, screening projects, bioassays 3599.
biosynthesis, *Nocardia fructiferi*, nitrogen sources, carbon sources, effects on 2590.
biosynthesis, *Staphylococcus simulans*, amino acids, cyclic AMP, effects on 2792.
biosynthesis suppression, *Bacillus megaterium*, temperature role 7425.
biosynthesis, *Vibrio parahaemolyticus*, growth rate correlation 1943.
Boritys cinerea, collagenum atramentarium, *Glomerella cingulata*, fruit rot, *Lycopersicon esculentum* 5797.
diffusion tests, *Bacillus cereus*, *Clostridium botulinum* 1935.
extracellular enzymes, *Pseudomonas fluorescens*, purification, characterization, thermal stability 4663.
extracellular, *Pseudomonas fluorescens*, physicochemical properties 95.
immobilized enzymes, hydrolysis, *Streptomyces fradiae* 6482.
inhibitors, effects on, influenza virus, protein biosynthesis 1583.
inhibitors, influenza virus reproduction, antiviral activity 9686.
inhibitors purification, *Lycopersicon esculentum*, *Phytophthora infestans* infection 5772.
Lactobacillus bulgaricus, effects on milk proteins 4796.
latex agglutination, Cryptococcus antigens, effects on interference factors 9992.
lysis, microorganisms 1917.
lysosomes, purification, characterization, *Physarum flavicomum* 9144.
Microporum canis, purification, characterization, keratin degradation 7367.
Mucor meihei, comparison, *Bacillus licheniformis* milk-clotting enzymes, biosynthesis, characterization, immobilization 4613.
Mucor pusillus, purification, biological properties 35.
Mucor pusillus, purification, characterization 1874.
multiple forms, fractionation, *Vibrio parahaemolyticus* 59.
Nocardia fructifera, isolation characterization 9186.
production, *Fusarium oxysporum*, *Rhizoctonia solani*, *Phoma exigua* 3670.
Propionibacterium acnes, isolation, purification, characterization 6529.
Pseudomonas fluorescens, effects on milk 8310.
Pseudomonas fluorescens, purification, immunochemistry, antigenic determinants 8291.
Pseudomonas, purification, physicochemical properties 3666.
purification, *Bacillus mesentericus* 951.
purification, characterization, *Candida albicans* 7328.
purification, characterization, *Pseudomonas aeruginosa* 7374.
purification, characterization, *Rhizopus chinensis* 41.
purification, characterization, *Streptomyces gneuseus* 6476.
purification, characterization, *Thermus caldophilus* 6478.
Rhizopus chinensis, pepstatin complex, X-ray diffraction 1904.
role antibiotics biosynthesis, actinomycetes 7123.
role, *Streptomyces gneuseus* streptomycin biosynthesis 2557.
rumen bacteria, structure-activity relationships 2793.
Saccharomyces carlsbergensis, immunoassays, beer 7322.
Saccharomycopsis lipolytica extracellular enzymes, production, purification, characterization 3681.
Saccharomycopsis lipolytica, mutants, production, characterization 1921.
soil microorganisms, kinetics 2343.
Streptomyces gneuseus, immobilized enzymes, probes, structure, lysozyme, casein 61.
Streptomyces gneuseus, immobilized enzymes, stability, urea denaturation 63.
Thermactinomyces vulgaris, activity, autolysis, thermal stability 2761.
Thermus aquaticus, biosynthesis 6514.
unfolding mechanisms, *Bacillus thermoproteolyticus* 4680.
- Proteinase inhibitor**,
N. M.R., amino acid composition, U.V. spectroscopy, *Streptomyces nigrescens* 7306.
- Proteins**,
acids solubility, electrophoresis, relationship, infection, viruses, fungi,
Lycopersicon esculentum 2983.
Anaplasma marginale, characterization, infected erythrocytes 6379.
antibiotics, purification, characterization, *Lactobacillus acidophilus* 6207.
Bacillus thuringiensis, detection, enzyme-linked immunosorbent assay 3561.
bacteria, determination methodology, rumen fluids, cattle 5408.
biosynthesis, *Trypanosoma cruzi* trypomastigotes, morphology, infectivity, Vero cells 1824.
C-type virus (mammalian), interspecific interactions, enzyme-linked immunosorbent assay 1760.
colostrum, cattle, *Streptococcus lactis* fermentation effects on 246.
Cucumis sativus, hypersensitive response, tobacco necrosis virus 3113.
electrophoresis, microorganisms, taxonomy (numerical), computer programs 8091.
electrophoretic mobility, *Haemophilus equigenitalis* 6372.
esterase, Hordeum vulgare disease resistance, powdery mildew, *Erysiphe graminis* f.sp. *hordei* 4060.
Fusarium, fermented food 5611.
gel electrophoresis, *Erwinia*, strains 3582.
hypersensitive response, tobacco mosaic virus, *Nicotiana tabacum* 3081.
leaves, *Phaseolus vulgaris*, hypersensitive response, infection, *Colletotrichum* Indemuthianum, alfalfa mosaic virus, peanut stunt virus 1333.
Legionella pneumophila, characterization, electrophoresis 9128.
levels, Sesamum indicum seeds, post-harvest decay, *Aspergillus niger*, *Alternaria alternata* 7717.
Lipodactyloides complex, characterization, *Verticillium dahliae*, wilt,
Solanum tuberosum 1246.
metabolism, rumen microorganisms, cattle, formaldehyde effects on 4857.
metabolism, *Triticum aestivum*, role disease resistance, stem rust, *Puccinia graminis* f.sp. *tritici* 4075.
milk, *Lactobacillus bulgaricus* proteinase effects on 4796.
milk products production, bacteria fermentation effects on 4805.
mitochondria, *Zea mays*, electrophoresis, disease resistance, *Helminthosporium maydis* 8616.
Mycobacterium tuberculosis, biosynthesis, characterization, association tuberculin activity 6384.
myeloma, monoclonal antibodies, use, enzyme immunoassay, detection, *Salmonella*, methodology 7241.
Nicotiana glauca x *Nicotiana debneyi*, hybrids, relationship, tobacco mosaic virus, resistance 1334.
nutrition, rats, effect on aflatoxin B1 carcinogenesis, liver 4902.

Proteins, (continued)

- outer membranes, *Brucella abortus*, isolation, purification, characterization 1827.
- outer membranes, *Vibrio parahaemolyticus*, purification, characterization 9124.
- Pasteurella variotii*, feeds, allergenicity, occupational exposure, man 7607.
- parainfluenza virus 3, vaccines, immunogenicity, mice, sheep 7189.
- Phaseolus vulgaris*, disease resistance, tobacco mosaic virus 8608.
- phenols solubility, plants leaves, electrophoresis, relationship, viruses infection 2982.
- +phospholipids complex use, *Zymomonas mobilis* ethanol biosynthesis, fermentation 144.
- Phytolacca americana*, antiviral activity, relationship disease resistance, reviews 9478.
- Phytolacca americana*, chemical modification, effects on antiviral activity 1576.
- Phytolacca americana*, inhibition herpes simplex virus DNA biosynthesis 3368.
- poliovirus, separation, high-performance liquid chromatography, methodology 8102.
- production, methylophilic bacteria, Japan, culture methodology 4502.
- production, *Saccharomyces fragilis*, nutrient requirements 926.
- production, *Sporothrichum pulverulentum*, use, Citrus, wastes 9131.
- products, nutritive value, cellulolytic bacteria growth, sugarcane bagasse 9287.
- R-protein, incidence, *Streptococcus* group B clinical isolates 6383.
- purification, characterization, sclerota, *Sclerotinia minor*, *Sclerotinia trifoliorum* 8.
- Rhizobium lupini, cell walls, chemical extraction, methodology 2700.
- Rhizobium* species, electrophoresis differentiation, classification 8206.
- Sclerotinia sclerotiorum*, sclerota, purification, characterization 7.
- separation techniques, yeasts nucleoprotein 9119.
- soybeans, +minced meat, bacteria, temperature effects on 228.
- stabilization, hemagglutination, bunyavirus, togavirus 3545.
- ton A gene, *Escherichia coli*, association sideromycin antibiotic resistance 641.
- viruses, radioactive labelling methodology 1761.
- viruses, spectrophotometry, solvents, methodology 8108.

Proteococcus

sensitivity typing, *Proteus* clinical isolates, association, antibiotic resistance 3264.

Proteoglycan

digestion, *Bacteroides thetaiotaomicron* 3792.

Proteolipids

purification, characterization, mitochondria, yeasts 913.

Proteolysis

cheese, ripening, lactic acid bacteria, organoleptic evaluation 7584.

cheese, ripening, salt, effects on 221.

collagen, *Clostridium histolyticum* collagenase 6412.

glucose dehydrogenase, *Bacillus megaterium* 8273.

Pseudomonas fluorescens, milk 4828.

Streptomyces griseus, streptomycin biosynthesis 9760.

Proteolytic bacteria

cattle rumen microorganisms, media (isolation) use ribulosebiphosphate carboxylase 7243.

food contamination, fishery products, counting methods 3808.

food contamination, spoilage, seafood 3825.

population dynamics, waste treatment, animal wastes, lagoons 4434.

soil, sludge, assays, methodology 850.

Proteolytic enzymes

actinomycetes, biosynthesis 8293.

activity, assays 7408.

activity, colicins, *Escherichia coli*, outer membranes 1914.

activity, *Lactobacillus bulgaricus*, *Lactobacillus casei*, γ radiation induction mutants, milk 8200.

biodegradation, *Escherichia coli* colicins, association, production 4370.

Cheddar cheese ripening, organoleptic evaluation, cheese flavor 9297.

effects on, catalsase, soil 3201.

extracellular, *Aspergillus candidus*, biosynthesis, association, deficiency, carbon, nitrogen, sulfur 1933.

extraction, soil 4215.

purification, characterization, *Bacteroides nodosus* 6466.

purification, characterization, *Rhizopus pygmaeus* 5520.

relationship, cephalosporin C, biosynthesis, growth conditions, effects on, *Acremonium chrysogenum* 4375.

ripening, Cheddar cheese, organoleptic evaluation 9271.

Streptomyces, isoelectric focusing 5521.

Streptomyces rimosus, fibrinolysis 1347.

Streptomyces roseoflavus, activity 1946.

temperature, effects on, *Thamnidium elegans*, *Mucor mucedo*, *Chaetostylum fresenii* 5512.

Proteus

antibacterial activity, *Chromobacterium violaceum* antibiotic Y-T0678H 9768.

antibacterial activity, acylureidopenicillins, antibiotic antagonism, cephalosporins 6144.

antibacterial activity, antibiotic synergism, clavulanic acid, ticarcillin 6147.

antibacterial activity, antibiotic synergism, semisynthetic penicillins, aminoglycoside antibiotics 7125.

antibacterial activity, aztreonam 8881.

antibacterial activity, mezlocillin, azlocillin, +cephalosporins 6148.

antibacterial activity, norfloxacin 7062.

antibacterial activity, temocillin 5254.

antibacterial activity, tobramycin, gentamicin, antibiotic synergism 7967.

antibiotic sensitivity testing methodology comparison 6090.

antibiotic SM-1652 antibacterial activity 734.

antibiotic SM-1652 antibacterial activity 3398.

aztreonam antibacterial activity 777.

cefotetan antibacterial activity 5198.

cephalosporins antibacterial activity 4347.

chromium chloride, ovotransferrin, antibacterial activity 6014.

clinical isolates, antibacterial activity, sisomicin 3425.

clinical isolates, antibiotic resistance 7024.

clinical isolates, Proteococcus sensitivity typing, association, antibiotic resistance 3264.

conalbumin antibacterial activity, microflora 5181.

detection, media (selective) methodology, association, food contamination 5416.

dioxidine antibacterial activity 1557.

factomycin antibacterial activity 3436.

food contamination, detection methodology 5617.

fosfomycin derivatives antibacterial activity 8890.

β -lactamase inhibitors, cephalosporins synergism 6133.

media, identification 5403.

Proteus, (continued)

morphology, colonial characteristics, drug resistance 657.

novobiocin antibacterial activity, pH effects on 6228.

primidic acid antibacterial activity 1556.

tetracyclines antibacterial activity, comparison 6182.

Proteus mirabilis,

antibacterial activity, cefaclor, cefadroxil 731.

antibacterial activity, Cephalosporins derivatives, structure-activity relationships 8840.

antibacterial activity, fosfomycin 7184.

antibiotic sensitivity testing 2393.

antibiotic sensitivity testing 9722.

antibiotic T-1982 antibacterial activity 735.

bacteriocin typing 1777.

catalsase, purification, physicochemical properties 3675.

cefotaxime, moxalactam, antibacterial activity comparison, antimicrobial agents 6126.

chlorhexidine, noxythiolin, phenoxethanol, antibacterial activity 6040.

clinical isolates, antibacterial activity, azlocillin 8847.

clinical isolates, antibiotic sensitivity testing 7132.

culture, freeze-drying, association, contamination analysis methodology 2684.

daunorubicin, adriamycin, antibacterial activity, structure-activity relationships 4404.

R factors, antibiotic resistance transfer, wastewater treatment 1548.

γ -Glutamylcysteine synthetase, chemical modification effects on kinetics 944.

γ -glutamylcysteine synthetase, purification, characterization 1915.

glycosaminophosphate isomerase (glutamine-forming), purification, characterization 7373.

isolates, hospitals, antibiotic resistance 8732.

meclizine β -lactam antibiotics antibacterial activity 3314.

norfloxacin antibacterial activity 2440.

norfloxacin antibacterial activity 2453.

penicillin-binding protein, binding clavulanic acid, sulbactam, effects on antibacterial activity 7134.

primidic acid antibacterial activity 1556.

proticase purification, characterization 8882.

sulfonamide susceptibility, association, cotrimoxazole drug resistance 6004.

urinary tract clinical isolates, norfloxacin antibacterial activity 9671.

urinary tract isolates, antibiotics sensitivity 8813.

Proteus morganii,

antibacterial activity, antibiotic synergism, cefotaxime, 3-desacetylcefotaxime 6117.

antibacterial activity, antibiotics+ethonum 1558.

antibacterial activity, mezlocillin, azlocillin, +cephalosporins 6148.

antibacterial activity, piperacillin 9757.

antibiotic L-640,876 antibacterial activity, mechanisms, membrane permeability 4409.

antibiotic synergism, antibiotic antagonism, cefotaxime, 3-desacetylcefotaxime 6118.

cefotaxime, moxalactam, antibacterial activity comparison, antimicrobial agents 6126.

contamination, *Saccharomyces cerevisiae*, acetic acid reduction 4773.

flagellin, α -N-methyllysine levels 5478.

histamine production, media (culture), seafood 2674.

threonine dehydratase, biosynthesis, purification, characterization 1900.

Proteus rettgeri,

antibacterial activity, piperacillin 9757.

antibiotic resistance, β -lactam antibiotics induction β -lactamase 3305.

cefotaxime, moxalactam, antibacterial activity comparison, antimicrobial agents 6126.

penicillin amidase, purification, characterization, immobilization 1893.

respiratory tract infection, bekanamycin treatment, man, antibacterial activity 6186.

Proteus stuartii,

antibacterial activity, aztreonam 8881.

Proteus vulgaris,

aldehyde dehydrogenase (NADP⁺), purification, characterization 4649.

antibacterial activity, synthetic gristain 8884.

antibiotic resistance, β -lactam antibiotics induction β -lactamase 3305.

antibiotic synergism, antibiotic antagonism, cefotaxime, 3-desacetylcefotaxime 6118.

carbapenem, derivatives, in vitro, antibacterial activity 1650.

cefotetan inactivation β -lactamase 4368.

cefuroxim, antibacterial activity 1612.

β -lactam antibiotics+antineoplastic drugs synergism, antibacterial activity 3385.

β -lactamase, suicide inhibitors 2810.

lactic acid biosynthesis 8206.

plants extracts antibacterial activity, Iran 2458.

respiratory tract infection, bekanamycin treatment, man, antibacterial activity 6186.

Protharscarin,

Streptomyces umbrinus subsp. *raffinophilus*, biosynthesis, structure, antibacterial activity 1668.

Proticine,

Proteus mirabilis, purification, characterization 8882.

Protomyces marcosporus,

role, *Conandrum sativum* canker pathophysiology 7711.

Protone,

release, yeasts, spectrophotometry, detection 2710.

transfer, stereospecific, phosphoenolpyruvate-protein phosphotransferase enzyme I phosphorylation, *Escherichia coli* 7398.

Protoplast fusion,

Saccharomyces cerevisiae, hybridization, genetic engineering, association, ethanol production 8402.

Protoplasts,

actinomycetes, membrane fusion, recombination, technology 5422.

Bacillus megaterium, *Micrococcus lysodeikticus*, gramicidin S lysis 2577.

cell fusion, *Streptomyces hygroscopicus*, bialaphos, biosynthesis 9781.

Collybia velutipes, *Pleurotus ostreatus*, formation methodology 8166.

Dactylium dendroideus mycelia, release, culture systems 9544.

formation, *Streptococcus mutans*, mutanolysis treatment, dairy industry 5414.

fusion, fungi, β -lactam antibiotics biosynthesis, recombination 8806.

fusion hybrids, *Candida albicans*, nystatin resistance 658.

fusion, *Penicillium*, interspecific hybridization, strains selection 5439.

fusion, *Saccharomyces diastolicus*, transformation, exo-1,4- α -D-glucosidase

Protoplasts, (continued)

- production 7323.
 fusion, *Staphylococcus aureus*, gene mapping, computer applications 4508.
 infected, tobacco mosaic virus, turnip yellow mosaic virus, identification, autoradiography 8094.
 methodology, *Micromonospora rosaria* mutagenesis 9075.
Neurospora crassa, detection methodology, antifungal activity, antibiotics 5440.
Nicotiana aestivalis, tobacco mosaic virus multiplication inhibition.
 poly(2-methyl-5-vinylpyridine N-oxide) role 8582.
Nicotiana tabacum, actinomycin D, effects on, tobacco mosaic virus, tobacco ringspot virus, tobacco rattle virus, potato leaf roll virus, infection 7701.
Nicotiana tabacum leaves, tobacco mosaic virus infection 3041.
Nicotiana tabacum, secretions, inhibition, tobacco mosaic virus, replication 3114.
Penicillium chrysogenum, immobilized cells, vesicles, penicillin G production 2542.
Pseudomonas putida, formation methodology, reversion 2701.
 regeneration, methodology, *Clostridium pasteurianum* 9029.
 regeneration, *Streptomyces*, relationship macrolide antibiotics biosynthesis 6166.
Saccharomyces cerevisiae, encapsulation, products, recovery, methodology 9067.
Schizophyllum commune, glucans biosynthesis 1955.
Solanum tuberosum, response, *Phytophthora infestans*, hyphae, cell walls, components 3036.
Streptomyces, *Micromonospora*, preparation, methodology 6322.
Protozoa,
 interaction, bacteria, soil 552.
Providencia,
 cefotetan antibacterial activity comparison 6134.
 immobilized cells, α -keto- γ -methyl butyric acid production 1845.
 media, identification 5403.
Providencia alcalifaciens,
 penicillins antibacterial activity 5196.
Providencia stuartii,
 antibacterial activity, nalidixic acid, ciprofloxacin, norfloxacin, piperimide acid 7924.
 chlorhexidine, noxytholin, phenoxymethanol, antibacterial activity 6040.
 penicillins antibacterial activity 5196.
Prumycin,
Bacillus cereus, biosynthesis 4423.
Prunes,
 fungi post-harvest decay 5801.
 spoilage, fungi 4777.
Pruning,
 disease control, blister rust, *Cronartium ribicola*, *Pinus strobus* 1466.
Pinus monticola, disease control, blister rust, *Cronartium ribicola* 1457.
 rust, *Gleditsia triacanthos*, association *Nectria cinnabarina* canker 9525.
 wounds, fungicides disease control, white rot, *Coriulus versicolor*, *Malus pumila* 6873.
 wounds, microorganisms disease control, fungicides treatment 7767.
Prunus,
 American plum line pattern virus infectivity 394.
 X disease, Mollicutes, disease transmission, *Collidosorus montanus* 4973.
 X disease, mycoplasma-like organisms, mixed infection, *Spiroplasma citri*, etiology 3025.
 experimental infection, prunus necrotic ringspot virus, pathology 405.
 ilarvirus isolates, association, mosaic disease, ringspot, dwarf disease 5740.
 necrotic ringspot virus, localization, pollen, enzyme-linked immunosorbent assay 2148.
 orchards, incidence, *Phytophthora* 386.
 pollen, prunus necrotic ringspot virus localization 1219.
 tomato ringspot virus, disease reservoirs 1209.
 tomosvirus isolation, identification, companion, petunia asteroid mosaic virus, tomato bushy virus 390.
Prunus amygdalis,
 fungal flora, seed composition, water activity effects on 5803.
 dieback, *Eutypa armeniaca* 6786.
 pollen, prunus necrotic ringspot virus localization 1219.
Prunus armeniaca,
 wound infection, *Chondrostereum purpureum*, disease control, paints+fungicides 8629.
Prunus avium,
 cherry leaf roll virus infection 2143.
 heat treatments, viruses elimination 8585.
 little cherry disease, virus-like particles isolation, characterization 5732.
 sour cherry necrotic ring spot virus infection 2144.
 wound infection, *Chondrostereum purpureum*, disease control, paints+fungicides 8629.
Prunus cerasifera,
 microorganisms canker, *Nematoda* effects on pathogenesis 1212.
Prunus caroliniana,
 infection, *Coccomyces himalis*, water effects on pathogenesis 1203.
Pseudomonas syringae dissemination, rain water, monitoring methodology 6785.
 sour cherry necrotic ring spot virus infection 2144.
Prunus domestica,
 canker, *Pseudomonas syringae* pv. *syringae*, disease control, fumigation 5743.
 meristem tip culture, elimination, plum pox virus 2246.
 silver leaf, *Chondrostereum purpureum*, biological control 4067.
Prunus domestica subsp. domestica,
 rust, *Tranzschelia discolor*, host range, sporulation 3967.
Prunus domestica subsp. insititiae,
 rust, *Tranzschelia discolor*, host range, sporulation 3967.
Prunus necrotic ringspot virus,
 experimental infection, *Prunus*, pathology 405.
 localization, pollen, *Prunus* 1219.
Prunus persica,
 benomyl resistance, *Monilinia fructicola* infection, comparison treatment, captan, prochloras 5719.
 blossom blight, *Monilinia fructicola*, benomyl resistance, disease control 5835.
 X disease, oxytetracycline hydrochloride treatment 2152.
 disease resistance, gummosis, *Botryosphaeria dothidea* 2248.
 fungi fruit rot symptom 5730.
 gummosis, *Botryosphaeria*, pathology 1217.
 gummosis, epidemiology 1214.
 Leucostoma cincla infection, disease resistance 3963.
Monilinia fructicola infection, pathogenicity, fungicides resistance 2278.

Prunus persica, (continued)

- Monilinia fructicola* overwintering, fungicides effects on sporulation 7763.
 orchards, canker, *Botryosphaeria dothidea* 1223.
 orchards, disease control, fungicides, brown rot, *Monilinia fructicola* 1405.
 orchards, disease spread, *Pseudomonas persicae* 4972.
 phony disease, bacteria detection, enzyme-linked immunosorbent assay 7684.
 phony disease, Rickettsia-like organisms isolation, culture, pathogenicity 6787.
 root rot, cistocyte tabesones 2151.
 sour cherry necrotic ring spot virus infection 2144.
Prunus salicina,
 gram-negative bacteria scald, isolation, pathogenicity, culture 1153.
Prunus salicina,
 scald, bacteria, epidemiology, Brazil 1221.
Psalliotia hortensis,
 iron inactivation proteinase, purification, characterization 42.
Pseudomonas coccovenans,
 bongkrekic acid, inhibition bromelain, papain, ficin 2079.
Pseudocercospora indica sp. nov.,
 isolation, *Zepharanthus rosea*, India, new records 3989.
Pseudocercospora herpotrichoides,
 eyespot, shading, effects on Gramineae senescence 3956.
 foot rot, antifungal activity, peracetic acid, Gramineae 1394.
 footrot, factors affecting, *Triticum aestivum*, disease resistance 4087.
 footrot, treatment, benomyl, *Triticum aestivum* 2284.
 Gramineae footrot pathogens antagonism, *Fusarium*, *Rhizoctonia cerealis* 1148.
 infection, *Hordeum*, epidemiology, seasonal variations 1150.
 rainfall spores dispersal, disease spread, eyespot, *Triticum aestivum* 5727.
 spores, rainfall dispersal, isolation, soil 5921.
Pseudomonas,
 amino acids biosynthesis, 4-chlorobenzoic acid media 7308.
 antagonism, *Trichoderma hamatum*, *Pisum sativum* seeds, association, *Pythium rot*, biological control 5820.
 antibacterial activity, *Chromobacterium violaceum* antibiotic Y-T0678H 9768.
 antibacterial activity, β -lactam antibiotics 4340.
 antibacterial activity, aminoglycoside antibiotics 7975.
 antibacterial activity, aminoglycoside antibiotics+cephalosporins, antibiotic synergism 736.
 antibacterial activity, antibiotic Bu-2470 8888.
 antibacterial activity, azlocillin, ticarcillin, carbenicillin 744.
 antibacterial activity, cefoxitin, ceftazoxime, antibiotic antagonism, penicillins 2533.
 antibacterial activity, cephalosporins 1606.
 antibacterial activity, dibekacin, comparison, tobramycin 2584.
 antibacterial activity, mezlocillin, penicillins, cephalosporins 9709.
 antibacterial activity, moxalactam, ceftazidime, cephalosporins 4344.
 antibacterial activity, norfloxacin 7062.
 antibacterial activity, O-demethylfortimicin 4413.
 antibiotic resistance, septicemia, man 645.
 antibiotic sensitivity testing 2393.
 antibiotic sensitivity testing 6111.
 antibiotic sensitivity testing methodology comparison 6090.
 apicidin antibacterial activity 2556.
 aztreonam antibacterial activity 777.
 bile acids catabolism, *Actinomyces*, bile acids catabolism 149.
 biodegradation, dichlorvos 5584.
 biodegradation, mineralization, phenmedipham 5926.
 biodegradation, nitroanalines 5581.
 biodegradation, odors compounds, skatole, indole, butyraldehyde 5580.
 biodegradation, O,O-dimethyl phosphorodithioate, pesticides (organophosphorus) derivatives 3787.
 biodegradation, PCB 2895.
 biodegradation, surfactants, in vitro 8432.
 biodegradation, 6-aminohexanoic acid 3783.
 blight, Glycine max, symptoms, relationship, coronatine biosynthesis 2990.
 +Candida utilis, mixed culture, mesquite wood, cattle feeds production 4866.
 carbaryl, naphthol, inhibition, nitrification 7007.
 carbon sources, factors affecting acetylene reduction 4244.
 ceftazidime antibacterial activity 6121.
 ceftazidime antibacterial activity 6122.
 clinical isolates, antibacterial activity, ceftazidime, cefotaxime, moxalactam 4365.
 clinical isolates, antibiotic resistance 7024.
 conalbumin antibacterial activity, microflora 5181.
 contamination, hydrogen cyanide, fishery cyanogenesis assays 3556.
 contamination, *Xiphias gladius*, fishery products, packaging, chemistry 4808.
 denitrification, genetic analysis, reviews 5119.
 dieldrin, metabolism (selective) methodology, association, food contamination 5416.
 2,4-dichlorophenoxyacetic acid biodegradation 4759.
 distribution, feeds, radiation disinfection 7605.
 dodecylthioxy sulfate biodegradation 148.
 drinking water isolates, antibiotic resistance 3480.
 enkephalin hydrolysis, enzymatic activity, bestatin analogs effects on 7551.
 extracellular polymers, carbohydrate composition 1958.
 extracellular polysaccharides, comparison, gels 980.
 R factors, animal isolates, *Pisces* 3275.
 fermenters, methanol metabolism 6318.
 fishery products, storage conditions, carbon dioxide, nitrogen, temperature, effects on 8498.
 food contamination, beef, pork, temperature effects on 241.
 food contamination, beef vacuum packaging, oxygen barriers films 261.
 fosfomycin derivatives antibacterial activity 8890.
 galactonate dehydratase, purification, characterization 6437.
 glutamin-(asparagin)-ase, crystallography 7399.
 glycerate dehydrogenase, purification, characterization 4641.
 glycosidases biosynthesis 5516.
 gold, biochemistry 7013.
 growth, milk, refrigeration, storage 4830.
 growth, pH, temperature, cooling water, paper mills 7201.
 2-haloacetaldehyde, purification, characterization 7370.
 heat resistance, dairy products, incidence 4814.
 hexachlorophene drug resistance, conjugation, R factors 6030.
 hydrocarbons emulsifiers, solvents 9632.
 hydrocyanic acid production enzymes fractionation methodology, column chromatography+ detergents, anaerobic conditions 4505.
 α -hydroxy acid production 2743.
 hydroxymethylglutaryl-CoA reductase 8227.

Pseudomonas, (continued)

identification, isolation, *Eichhornia crassipes* 3056.
 identification, lipopolysaccharides, carbohydrate composition, lipid composition, nitrogen fixation, isolation, rhizosphere, *Deschampsia caespitosa* 9597.
 inoculum, *Zea mays*, roots, association, Rhizobium, methodology 3548.
 isomylase, structure, X-ray scattering 964.
 isolation, milk, meat 3826.
 β -lactam antibiotics derivatives antibacterial activity, synthesis 6097.
 lipoxigenase biosynthesis, hyaluronic acid effects on 7412.
 lysine production, use, DL- α -amino- ϵ -caprolactam 6395.
 myxoviruses, antibacterial activity 3433.
 naphthalene oxygenase, purification, characterization 7385.
 nitrogen fixation, rhizosphere, *Onyza sativa* 9596.
 n-riphenetol biodegradation 2013.
 norfloxacin antibacterial activity 2453.
 norfloxacin antibacterial activity 8760.
 pathogenicity effects on, *Beta vulgaris* crop production 403.
 penicillins antibacterial activity, β -lactamase activity, disc-diffusion test interpretation 6145.
 phosphorus mineralization, oil shales, *Rhabditis* 556.
 plant diseases, *Vigna unguiculata*, factors affecting pathogenesis 4931.
 plants pathogens, preservation, gels+cold storage 2688.
 proteinase, purification, physicochemical properties 3666.
 replication, industrial effluents, wastewater treatment 793.
 replication, *Nicotiana tabacum*, factors affecting host-parasite interactions 5816.
 seed treatments, disease control, *Gaeumannomyces graminis*, take-all, *Triticum aestivum* 3158.
 silver resistance 5162.
 soft rot, *Cactaceae* 1291.
 soft rot, tubers, *Solanum tuberosum* 5752.
 species, wetwood etiology, *Ulmus americana* 8657.
 spoilage, beef, vacuum packaging, refrigeration 5638.
 styrene dimers biodegradation 7558.
 D-(+)-tartate dehydrogenase isoenzymes, isolation, characterization 21.
 temocillin antibacterial activity 2550.
 trisulfate oxidation, enzymes isolated, marine environment 7404.
 use, disease control, take-all, *Gaeumannomyces graminis*, *Triticum aestivum* 4090.
 D-xylo-aldonate dehydratase, purification, characterization 5441.
 D-xylose dehydrogenase, purification, characterization 4630.

Pseudomonas acidovorans,
 antibacterial activity, antibiotic synergism, cefotaxime, 3-desacetylcefotaxime 6117.

Pseudomonas aeruginosa,
 2-pyruvate-4-decarboxylic acid biosynthesis, gallic acid catabolism 1849.
 acetamide, isolation, man, cystic fibrosis 9904.
 Achatina fulica, mucin, antibacterial activity 5185.
 adherence, plastics 3492.
 aldehyde dehydrogenase isoenzymes, purification, characterization 4650.
 amikacin resistance, transposon Tn2424 mediation 7899.
 [2-(α -methylphosphonate)-pyruvate aminotransferase, purification, characterization 7405.
 aminoglycoside antibiotics+carbenicillin, antibacterial activity 1619.
 aminoglycoside antibiotics, antibiotic sensitivity testing 4351.
 M.K. 0366 antibacterial activity 6055.
 antibacterial activity, β -lactam antibiotics 4330.
 antibacterial activity, acylureidopenicillins, antibiotic antagonism, cephalosporins 6144.
 antibacterial activity, amikacin, gentamicin, antibiotic synergism, \pm carbenicillin, \pm piperacillin 755.
 antibacterial activity, antibiotic Bu-2470 8888.
 antibacterial activity, antibiotic SQ 26,917 8039.
 antibacterial activity, antibiotic synergism, amikacin, cefoxitin, fosfomycin, N-formycin 3394.
 antibacterial activity, antibiotic synergism, midecamycin, + polymyxin B, + carbenicillin, + dibekacin, + fosfomycin 1689.
 antibacterial activity, azlocillin 8823.
 antibacterial activity, azlocillin, piperacillin, cephalosporins 9732.
 antibacterial activity, aztreonam 8203.
 antibacterial activity, aztreonam 8881.
 antibacterial activity, carbenicillin, mezlocillin, N-acetyl cysteine effects on 5281.
 antibacterial activity, cefoperazone 7146.
 antibacterial activity, cefoperazone, cefsulodin, ceftazidime 7993.
 antibacterial activity, ceftazidime 4367.
 antibacterial activity, ceftazidime 4374.
 antibacterial activity, ceftazidime 8747.
 antibacterial activity, ceftizoxime, antibiotic synergism, tobramycin 2534.
 antibacterial activity, cephalosporins derivatives 8838.
 antibacterial activity, cephalosporins, penicillins, agar diffusion test 728.
 antibacterial activity, ciprofloxacin 9661.
 antibacterial activity, derivatives, kanamycin, dibekacin, ribostamycin 8853.
 antibacterial activity, fosfomycin 7184.
 antibacterial activity, gentamicin 1624.
 antibacterial activity, mezlocillin, comparison, penicillins 6141.
 antibacterial activity, moxalactam 5269.
 antibacterial activity, moxalactam enantiomers 5274.
 antibacterial activity, N-formimidoyl thienamycin+amikacin 1660.
 antibacterial activity, norfloxacin 7091.
 antibacterial activity, penicillins, aminoglycoside antibiotics 741.
 antibacterial activity, pharmaceuticals 8753.
 antibacterial activity, piperacillin 9757.
 antibacterial activity, polyethylene glycol 8774.
 antibacterial activity, pyridonecarboxylic acid derivatives 7086.
 antibacterial activity, silver nylon fabrics 3371.
 antibacterial activity, sorbic acid, pH 7065.
 antibacterial activity, thienamycin derivatives 3442.
 antibacterial activity, tobramycin, gentamicin, antibiotic synergism 7967.
 antibacterial activity, 1-aryl-3-(3-nitro-4-methoxyphenyl)-5-phenyl formazan, 3-aryl-5-(3-nitro-4-methoxyphenyl)-2-phenyl tetrazolium bromide 6082.
 antibacterial activity, 2-(2-aminothiazol-4-yl)-2-sulfatoethyl cephalosporins 7991.
 antibacterial activity, ceftriaxone, disc-diffusion test 7998.
 antibiotic resistance, aminoglycoside antibiotics, incidence, Switzerland, clinical surveys 6003.
 antibiotic resistance, gentamicin, carbenicillin, β -lactam antibiotics

Pseudomonas aeruginosa, (continued)

antibacterial activity 740.
 antibiotic sensitivity testing 3386.
 antibiotic sensitivity testing 7068.
 antibiotic sensitivity testing, antibiotic resistance 7023.
 antibiotic sensitivity testing, ceftazidime, agar diffusion test 4371.
 antibiotic sensitivity testing, methodology comparison 9761.
 antibiotic sensitivity testing, nosocomial infection, man 6098.
 antibiotic SM-1652 antibacterial activity 734.
 antibiotic SM-1652 antibacterial activity 3398.
 antibiotic synergism, antibiotic antagonism, cefotaxime, 3-desacetylcefotaxime 6118.
 antibiotic synergism, azlocillin, aminoglycoside antibiotics 8849.
 antibiotic U-63196E antibacterial activity, β -lactamase stability, new records 8832.
 antibiotics antibacterial activity 6128.
 antibiotics, purification, physicochemical properties 7175.
 antimicrobial activity, oxovinyl triphenyl phosphonic acid derivatives 9700.
 antiviral activity, antibiotic synergism, gentamicin+carbenicillin 7128.
 azlocillin, antibacterial activity 8848.
 azlocillin, mezlocillin, antibacterial activity 6142.
 azurin, coordination geometry, copper active sites, Raman spectroscopy 9.
 browning, association, *Pseudomonas marginata* rot, *Allium cepa* 3063.
 butyric acid, fumaric acid, biosynthesis, thermodynamics 8201.
 carbamate kinase, purification, function, regulation 37.
 carbapenems antibacterial activity, in vitro, in vivo 6216.
 catechol 1,2-dioxygenase, catechol 2,3-dioxygenase, isolation, characterization 7392.
 cefotetan antibacterial activity 5198.
 cefotetan antibacterial activity comparison 6134.
 cefsulodin, + ticarcillin, + mezlocillin, + aminoglycoside antibiotics, antibacterial activity 6093.
 ceftriaxone, + aminoglycoside antibiotics, antibiotic synergism, antibiotic antagonism 7966.
 cefuroxim, antibacterial activity 1612.
 cell death, soil, characterization 2353.
 cell membranes, alcohol dehydrogenase, purification, kinetics, mechanisms 7406.
 cell membranes, cytochrome c-551, cytochrome c-555, purification, characterization 1928.
 cephalosporins+aminoglycoside antibiotics antibacterial activity 1607.
 chlorhexidine, noxythiolin, phenoxymethanol, antibacterial activity 6040.
 clinical isolates, antibacterial activity, azlocillin 8847.
 clinical isolates, antibacterial activity, cefoxitin, tobramycin, comparison N-formimidoyl thienamycin 7076.
 clinical isolates, antibacterial activity, cephalosporins 9740.
 clinical isolates, antibacterial activity, cephazolin, cephuroxime 8830.
 clinical isolates, antibacterial activity, gentamicin, tobramycin, netilmicin, media analysis 7074.
 clinical isolates, antibacterial activity, sisomicin 3425.
 clinical isolates, antibiotic sensitivity testing 1600.
 clinical isolates, blood culture, sucrose effects on detection 9955.
 clinical isolates, ethionium+antibiotics antibacterial activity 2523.
 comparison, *Pseudomonas stutzeri*, *Paracoccus denitrificans*, denitrification 5107.
 contamination, mineral water, bacteria 2027.
 contamination, water quality, association otitis externa, epidemiology, man 2630.
 culture, freeze-drying, association, contamination analysis methodology 2684.
 cyanide biosynthesis, aquatic environment, in vitro 6606.
 cytochrome C551, purification, carbon monoxide binding kinetics 4556.
 cytochrome c551, redox properties, optical properties 6546.
 cytochrome oxidase, N.M.R., magnetic susceptibility 2777.
 cytochrome oxidase, purification 4614.
 cytochrome peroxidase, heme redox properties, E.S.R. 3696.
 2,3-diacetamidoo-2,3-dideoxy-L-gulononic acid detection 4700.
 clodine, antibacterial activity 1557.
 disc-diffusion test, drug sensitivity testing, piperidic acid 7916.
 DNA gyrase, purification, characterization 2753.
 EDTA-tromethamine+antimicrobial agents, antibacterial activity 8750.
 effects on plasmids, mercury resistance freeze-thawing 3265.
 envelopes, cations effects on protein H1 biosynthesis, relationship, antibiotic resistance 5158.
 envelopes, membrane proteins, antibiotic resistance, polymyxin 2414.
 exotoxin A, toxoids preparation, photoaffinity labelling use 8050.
 exotoxins, bacteriostats, cytostatic agents, effects on HeLa cells 1108.
 exotoxins, purification, characterization 307.
 Fl factors, antibiotic resistance, drug resistance 6031.
 factumycin antibacterial activity 3436.
 food contamination, milk, meat, pH effects on 4795.
 N-formimidoyl thienamycin, antibacterial activity 3430.
 N-formimidoyl thienamycin antibacterial activity 7075.
 gentamicin antibiotic resistance, virulence, natural selection 6012.
 growth, sugar inhibition, association, wound infection treatment, man, in vitro 7056.
 3-guanidinopropionate amidinohydrolase, purification, characterization 1918.
 hydrocarbons utilization 7021.
 identification, media (culture) association
 9-chloro-9-(4-diethylaminophenyl)-10-phenylacridan 9954.
 incidence, ecological distribution, rivers 2621.
 isolates, hospitals, antibiotic resistance 8732.
 β -lactam antibiotics+antineoplastic drugs, synergism, antibacterial activity 3385.
 β -lactamase, β -lactam antibiotics, antibiotic resistance 7878.
 β -lactamase biosynthesis, genetic analysis 8287.
 β -lactamase, hydrolysis, cefotaxime, cefsulodin 4355.
 β -lactamase, hydrolysis susceptibility, moxalactam 5272.
 β -lactamase, inhibition, clindamycin 7155.
 β -lactamase, isoelectric focusing 7383.
 β -lactamase isolation, purification 4665.
 β -lactamase, mechanisms 86.
 lactic acid biosynthesis 6206.
 lectins, characterization 6378.
 lipopolysaccharides, detection, enzyme-linked immunosorbent assay 9915.
 lipopolysaccharides isolation methodology 8148.
 lipopolysaccharides, 2,3-diacetamido-2,3-dideoxy-D-mannuronic acid 3713.
 liquid culture, comparison, agar, media (culture) 9057.
 mannitol-binding protein, characterization 2.
 media (selective) 3615.

Pseudomonas aeruginosa, (continued)

mercuric reductase, N-terminus, active sites, amino acid sequence, homology
 glutathione reductase (NAD(P)H), dihydropyrimidine dehydrogenase 9175.
 microflora, treatment pools - U.V. radiation, hospitals 798.
 modification enzymatic, aminoglycoside antibiotics, association, antibiotic
 resistance 640.
 morphology, antibiotics effects on 9752.
 moxalactam, \pm gentamicin, antibacterial activity, antibiotic synergism 2530.
 mucoid form, alginate acid biosynthesis 2746.
 norfloxacin antibacterial activity 7057.
 norfloxacin, antibacterial activity 9662.
 norfloxacin antibacterial activity, comparison, nalidixic acid, cinoxacin,
 oxolinic acid 5197.
 norfloxacin antibiotic resistance, media (selective) 2404.
 novobiocin antibacterial activity, pH effects on 6228.
 otitis externa, man, bettis, water-borne diseases 8070.
 outer membranes, protein composition, association, polymyxin resistance 663.
 penicillin-binding protein, affinity ceftazidime, antibacterial activity 8835.
 pilin, amino acid sequence, secondary structure predictions 4575.
 plants extracts antibacterial activity, Iran 2458.
 plasma membranes, solubilization, sodium dodecyl sulfate 9664.
 plasmids, genes, antibiotic resistance 1544.
 poly(hexamethylene biguanide hydrogen chloride), antibacterial activity 2450.
 poly(N-benzyl-4-vinylpyridinium bromide), removal, water treatment, methodology
 9046.
 polymyxin antibiotic resistance, association, outer membranes membrane
 permeability 632.
 polymyxin antibiotic resistance, plasma membranes fatty acid composition 7040.
 proline dehydrogenase + 1-pyrolone-5-carboxylate dehydrogenase purification,
 characterization 1906.
 purification, characterization, proteinase 7374.
 pyocine typing, nosocomial infection clinical isolates 1781.
 pyocins, antibacterial activity 8920.
 pyocins, purification, characterization 2574.
 Roccal-D antibacterial activity 7918.
 serum bactericidal activity, amikacin: ceftazidime, cefoperazone \pm
 amikacin 3400.
 soaps contamination 2641.
 sodium dodecyl sulfate, biodegradation, antibacterial activity 9254.
 sodium hypochlorite decontamination, skin tissue culture 8092.
 temocillin antibacterial activity 6155.
 tetracycline sensitivity 7077.
 ticarcillin \pm tobramycin, calcium, magnesium, zinc, effects on, antibacterial
 activity 754.
 traptoson Tr2401 identification, association aminoglycoside antibiotics
 resistance 7050.
 triacylglycerol lipase, polysaccharides effects on biosynthesis 1945.
 U.V. radiation resistance, R factors, plasmid pBS12, plasmid pBS31 7037.
 urinary tract clinical isolates, norfloxacin antibacterial activity 9671.
 vaccines, preparation, administration, function 8238.
 vaccines, preparation, ultracentrifugation, ultrafiltration 3456.
 viability, freeze-thawing, skim-milk 220.
Pseudomonas andropogonis,
 leafspot, pathology, Trifolium repens 9320.
Pseudomonas cepacia,
 antibacterial activity, antibiotic synergism, cefotaxime, 3-desacetylcefotaxime
 6117.
 antibiotic SM-1652 antibacterial activity 3398.
 biodegradation, 2,4,5-trichlorophenyl acetate, soil contamination 4750.
 isolation, bis-(3-hydroxy-Z-oxocyclo-heptatrien-(3,5,7)-yl-sulfide, antibacterial
 activity 768.
 nitrogen mineralization, grazing, association, Mesodiplogaster, Acanthamoeba
 polyphaga, effects on 814.
 outer membranes, cytoplasmic membranes, isolation, characterization 4480.
 pigments, antibacterial activity, antifungal activity 1645.
 survival, nose sprays, thimerosal preservatives 7118.
 2,4,5-trichlorophenoxyacetic acid, biodegradation 1059.
Pseudomonas chloraphis,
 aliphatic nitrile hydratase, acrylamide biosynthesis 1982.
Pseudomonas cichorii,
 leafspot, pathogenicity, Pelargonium 5795.
 necrosis outbreaks, Chrysanthemum morifolium stems, USA, Florida 5023.
Pseudomonas citronellolis,
 methylcrotonyl-CoA carboxylase, geranyl-CoA carboxylase, purification,
 characterization 8234.
Pseudomonas corrugata,
 necrosis incidence, Lycopersicon esculentum stems, USA, Florida 5025.
 infection, Lycopersicon esculentum, pathology 2223.
Pseudomonas decuiae,
 immobilized cells, L-alanine biosynthesis 2745.
Pseudomonas decunhae,
 L-aspartate β -decarboxylase, L-alanine production 927.
Pseudomonas deoivans,
 pyruvate carboxylase, purification, characterization, kinetics 6454.
Pseudomonas demolyticum,
 petroleum biodegradation, sulfur metabolism 5991.
Pseudomonas elodes,
 polysaccharides, rheology, conformation 6581.
Pseudomonas fluorescens,
 leafspot, Ficus erecta 7715.
Pseudomonas fluorescens,
 alcohol dehydrogenase, isolation, purification, characterization 7381.
 antibacterial activity, hydroxycinnamic acid, esters 2448.
 aryl acylamidase, purification, characterization 7376.
 biodegradation, methylmercury 1996.
 biodegradation, toxicity testing, detergents 2874.
 carbon dioxide inhibition, association meat packaging, spoilage 7610.
 β -casein biodegradation 2020.
 cephalosporins-aminoglycoside antibiotics antibacterial activity 1607.
 cinnamic acid, esters, inhibition, growth 1555.
 cometabolism, m-chlorobenzoate, sodium benzoate levels effects on 2016.
 cooling water systems scales contamination, bactericides, nutrient availability
 effects on 4451.
 cyanide biosynthesis, aquatic environment, in vitro 6606.

Pseudomonas fluorescens, (continued)

cytoplasmic membranes, glucose dehydrogenase, purification, characterization
 4604.
 cytoplasmic membranes, glucose dehydrogenase, reduction ubiquinone,
 phospholipids, Triton X-100 activation 955.
 Dutch elm disease, Ulmus glabra, Scolytus vectors 1453.
 epoxidation, propylene, metabolism 7462.
 extracellular enzymes, triacylglycerol lipase, purification, characterization
 5491.
 extracellular proteinase, physicochemical properties 95.
 fensulfothion, biodegradation 7538.
 galactose dehydrogenase, purification, characterization 4608.
 growth, enzymes production, oxygen tension, batch culture 108.
 growth, milk, dissolved oxygen, cold storage 239.
 growth, proteolysis, milk 4828.
 4-hydroxybenzoate 3-monooxygenase, adenosine nucleotides, Cibacron blue,
 phosphate, metals inhibition 8275.
 4-hydroxybenzoate 3-monooxygenase, amino acid sequence 7400.
 4-hydroxybenzoate 3-monooxygenase, tertiary structure models 7402.
 4-hydroxybenzoate 3-monooxygenase apoenzymes, purification, characterization 954.
 4-hydroxybenzoate 3-monooxygenase, chemical modification 1880.
 induction, disease resistance, Nicotiana 3131.
 induction, disease resistance, Nicotiana 3133.
 methylketone, production, association, alcohols 7460.
 phytylgluconate dehydrogenase (decarboxylating) purification, characterization
 4692.
 proteinase, effects on milk 8310.
 proteinase, purification, characterization, thermal stability 4663.
 proteinase, purification, immunochemistry, antigenic determinants 8291.
 rhizosphere bacteria, effects on growth, yield, Solanum tuberosum 6937.
 styrene biodegradation pathways 8433.
Pseudomonas glycinea,
 blight, identification, biochemical characteristics, Glycine max 2991.
 disease resistance, agglutinins, leaves, Glycine max 3128.
Pseudomonas incognita,
 biodegradation, linallyl acetate 2901.
Pseudomonas ischrymans,
 Colletotrichum lagenarium, induction, disease resistance, Cucumis sativus 3124.
 disease resistance, inheritance, Cucumis sativus 8851.
Pseudomonas maltophilia,
 aniline utilization 3786.
 antibacterial activity, β -lactam antibiotics 7983.
 antibacterial activity, antibiotic Bu-2470 8888.
 antibiotic SM-1652 antibacterial activity 3398.
 biodegradation, herbicides, heat treatments, soil 5904.
 effects on corn meals, nutritive value 251.
 α -pinene biodegradation 5582.
 thenamycin media (isolation), feces 9066.
Pseudomonas marginalis,
 soft rot, post-harvest decay, tomatoes, storage conditions 9453.
Pseudomonas marginalis var. alfalfae,
 crown rot, Medicago sativa, USA, Utah 9322.
Pseudomonas marginata,
 Allium cepa rot, association, Pseudomonas aeruginosa browning 3063.
Pseudomonas ochraceae,
 4-oxalimesaconate hydrolase, 4-oxalcitramalate aldolase, purification,
 characterization 6480.
Pseudomonas oleovorans,
 hydrocarbons conversion, epoxides production association 9631.
 hydrocarbons conversion, methodology, characterization 8720.
Pseudomonas ovalis,
 iron superoxide dismutase, quaternary structure, X-ray crystallography 6561.
Pseudomonas paucimobilis,
 antimicrobial agents antibacterial activity, drug resistance 2512.
 soil, growth, nutrition, ATP production, relationship, nitrogen levels 4218.
Pseudomonas perfectomarinus,
 nitrous oxide reductase, purification, characterization 916.
Pseudomonas persicae,
 disease spread, Prunus persica, orchards 4972.
Pseudomonas phaseolicola,
 cell agglutination, Phaseolus vulgaris plant extracts, role, pathogenesis 8540.
 phytotoxins, chlorosis induction, Phaseolus vulgaris 2989.
Pseudomonas pisii,
 hypersensitive response, inhibition RNA biosynthesis, Nicotiana tabacum 5787.
 hypersensitive response, leaves ultrastructure, Nicotiana tabacum 6790.
 infection, Nicotiana tabacum, hypersensitive response 4980.
 infection Nicotiana tabacum leaves, hypersensitive response association mesophyll
 462.
Pseudomonas pseudoalcaligenes subsp. konjaci,
 leaf blight, Amorophalus konjac, pathogenesis 7716.
Pseudomonas pseudomallei,
 enzymes, infectivity, ureidosuccinic acid dihydrazide effects on 6056.
Pseudomonas putida,
 +Alcaligenes eutrophus, mixed culture, arsenic oxidation 2383.
 alkanes biodegradation 626.
 antibacterial activity, antibiotic Bu-2470 8888.
 cell disruption, alkane 1-monooxygenase isolation, n-alkanes oxidation 5507.
 3-chloro-D-alanine chloro-L-ylase, use, D-cysteine biosynthesis 4557.
 3-chloro-D-alanine metabolism, D-cysteine enzymatic synthesis 4581.
 D-cysteine biosynthesis 8204.
 cytochrome P-450, amino acid sequence, secondary structure 6491.
 dehalogenase, xenobiotics biodegradation 2884.
 formaldehyde dehydrogenase (glutathione), purification, characterization 6516.
 growth conditions, effects on, films, formation, methodology 2669.
 2-haloacid dehalogenase, purification, physicochemical properties 1872.
 4-hydroxy-4-methyl-2-ketoglutarate aldolase, purification, characterization 6429.
 immobilization methodology 8127.
 immobilized cells, biodegradation, caffeine, characterization 1065.
 juglone biodegradation 8453.
 2-oxo- β -4,5-trimethylcyclopentenylacetic acid oxidation, monooxygenase
 activity 1881.
 peat biodegradation 2877.
 phenols conversion, structure effects on 2882.
 phospho-2-keto-3-deoxy-gluconate aldolase structure, X-ray crystallography 2791.
 plasmid pSRQ50 role metabolism, β -citronellol, geraniol 6642.
 protoplasts formation, methodology, reversion 2701.

- Pseudomonas putida**, (continued)
 putidaminoxin, reduction kinetics, sodium dithionite, superoxide radicals, putidaminoxin-NAD⁺ reductase 2790.
 2-pyrone-4,6-dicarboxylic acid biosynthesis, gallic acid catabolism 1849.
 rhizosphere bacteria, effects on growth, yield, *Solanum tuberosum* 6937.
 superoxide dismutase, redox-potential 4588.
- Pseudomonas putrefaciens**,
 food contamination, beef, minced meat 3841.
- Pseudomonas rhodos**,
 mutants, 4,4'-diopcarotene-4,4'-dial, 4,4'-diapocarotene-4-al-4'-oic acid, glucosyl-4,4'-diapocarotene-4-oate, biosynthesis pathways 4566.
- Pseudomonas saccharophila**,
 6-phospho-2-keto-3-deoxy-galactonate aldolase, phospho-2-keto-3-deoxy-gluconate aldolase, fractionation 6434.
- Pseudomonas solanacearum**,
 infection, disease resistance, *Solanum phureja*, temperature effects on 434.
- Pseudomonas solanacearum**,
 agglutination, glycoproteins, *Nicotiana tabacum*, callus culture 1351.
 infection, *Nicotiana glauca*, association, production, phytoberin, phytoberol 6845.
 infection, *Solanum*, disease resistance 2269.
 infection, *Solanum tuberosum*, factors affecting disease resistance 3107.
 media (selective) 3598.
 plant diseases, roots, crops, greenhouses, USA, North Carolina 9411.
 survival, *Lycopersicon esculentum* wilt, USA, North Carolina soil 8675.
 survival, soil moisture, soil types 9575.
 tannins soil amendment effects on, respiration, glucose oxidation 593.
 vertical distribution, soil, wilt, *Lycopersicon esculentum* 5759.
 wilt, *Cyphomandra betacea*, disease resistance 1384.
 disease resistance, *Solanum tuberosum*, biological control 5833.
 wilt, hypersensitive response, agglutinins, *Solanum tuberosum* 3127.
 wilt, *Lycopersicon esculentum*, disease resistance 1380.
 wilt, *Lycopersicon esculentum*, grafting, disease resistance 3130.
 wilt, *Lycopersicon pimpinellifolium*, disease resistance 6791.
 wilt, *Solanaceae*, host range 2232.
 wilt, susceptibility, *Peperomia hortorum* 5012.
- Pseudomonas stutzeri**,
 comparison, *Pseudomonas aeruginosa*, *Paracoccus denitrificans*, denitrification 5107.
 corrosion, steel, role dissolved oxygen, sea water 9626.
 purification, characterization, α -amylase 2771.
 1,2,3,4-tetrahydronaphthalene biodegradation 8718.
- Pseudomonas syringae**,
 canker, *Prunus cerasifera*, *Nematode* effects on pathogenesis 1212.
 enhancement, cryoinjury, *Lycopersicon esculentum*, Glycine max 2224.
 Glycine max accumulation phytoalexins association, N-phosphonomethyl glycine effects on 498.
 ice nuclei activation, *Erwinia herbicola*, biological control, cryoinjury, *Zea mays* 8642.
 infection, association, frost, temperature, symptoms, *Populus trichocarpa* 4173.
 leaf blight, etiology, *Zizania aquatica* 5702.
 leafspot, *Protea cynaroides* 6804.
Prunus cerasifera dissemination, rain water, monitoring methodology 6785.
 syringacin W-1 biosynthesis, activity, *Phaseolus vulgaris* tissues infection 2114.
 tagetitoxin, structure 6726.
- Pseudomonas syringae pv. lachrymans**,
 disease spread, rhizosphere, roots, *Cucumis sativus* 4997.
 leafspot, *Cucumis sativus*, disease control, seed treatments 9501.
 survival, soil, plant debris, association, pathogenicity, *Cucumis sativus* 9574.
- Pseudomonas syringae pv. papulans**,
 susceptibility, *Malus pumila*, seasonal variations 400.
- Pseudomonas syringae pv. phaseolicola**,
 blight, *Phaseolus vulgaris*, disease control 9462.
- Pseudomonas syringae pv. pisi**,
 blight, *Pisum sativum*, incidence, Israel 9335.
- Pseudomonas syringae pv. savastanoi**,
 virulence, *Olea europaea*, leaves 5742.
- Pseudomonas syringae pv. syringae**,
 blight, *Phaseolus vulgaris*, disease control 9462.
 brown spot, *Zizania aquatica*, pathogenesis 9350.
 canker, disease control, fumigation, *Prunus domestica* 5743.
 identification, immunofluorescence, ice crystals formation 6310.
 outer membranes protein composition, relationship plant diseases virulence 7307.
 smoke, effects on, ice nuclei formation, activity 8527.
 spot etiology, *Hordeum vulgare* 4970.
 syringomycin, syringotoxin, effects on, *Zea mays*, mitochondria 2966.
- Pseudomonas syringae pv. tabaci**,
 lipopolysaccharides, association, encapsulation, *Nicotiana tabacum*, leaves 3064.
- Pseudomonas syringae pv. tagetis**,
 chlorosis, host range, *Helianthus annuus* 1304.
 infection, *Tagetes*, growth, cultivars, effects on symptoms 2231.
 leafspot, *Ambrosia artemisiifolia* 5003.
 leafspot, seed-borne diseases, *Helianthus annuus* 1303.
- Pseudomonas syringae pv. tomat**,
 fungicides, streptomycin, antibacterial activity, in vitro, disease control, speck, *Lycopersicon esculentum* 5822.
 identification, immunofluorescence, ice crystals formation 6310.
 infection, *Lycopersicon esculentum* developmental stages effects on susceptibility 2231.
 infection, *Lycopersicon esculentum* seeds, survival 412.
 necrosis, plants, etiology 3065.
 perithecia, identification 5385.
 speck, disease resistance, *Lycopersicon esculentum* 5049.
 speck, disease resistance, plant breeding, *Lycopersicon esculentum* 6842.
 speck, disease spread, environmental factors, *Lycopersicon esculentum* 1297.
 speck, *Lycopersicon esculentum*, disease resistance 1381.
 speck, *Lycopersicon esculentum*, scanning electron microscopy, pathology 2233.
- Pseudomonas syringae subsp. phaseolicola**,
 halo blight, *Phaseolus vulgaris*, effects on nodulation, *Rhizobium phaseol* 7652.
- Pseudomonas syringae subsp. savastanoi**,
 infection, *Fraxinus excelsior*, pathology 4172.
- Pseudomonas syringae pv. coronafaciens**,
 chocolate spot, *Zea mays* 1199.
- Pseudomonas testasteroni**,
 cell membranes, testosterone-binding protein, purification, characterization 6394.
- Pseudomonas testasteroni**, (continued)
 3 α -hydroxysteroid dehydrogenase, bioassays, bile acids 4504.
 3 α -hydroxysteroid dehydrogenase substrate specificity 1873.
 Δ^5 -3-ketosteroid isomerase, photoaffinity labelling, nandrolone, Δ^5 -testosterone 5489.
 2-pyrone-4,6-dicarboxylic acid biosynthesis, gallic acid catabolism 1849.
 steroid-binding protein, purification, characterization 1837.
- Pseudomonas thermophila**,
 malate dehydrogenase, production, purification 1899.
 vitamins biosynthesis 1978.
- Pseudomonas tolaasii**,
 attachment, *Agaricus bisporus*, scanning electron microscopy, blight 3051.
 blotch, symptoms, pathogenesis, experimental infection 1293.
- Pseudomonas tomat**,
 speck, disease resistance, inheritance, *Lycopersicon* 5036.
- Pseudomonas viridiflava**,
 role, crown rot, root rot, *Medicago sativa*, wilt, *Lotus corniculatus* 6744.
- Pseudomonas vulgaris**,
 blight, *Phaseolus vulgaris* disease resistance, blight, *Pseudomonas vulgaris*, *Phaseolus vulgaris* disease resistance 5815.
- Pseudomonas yoshimotoensis**,
 antimicrobial antibiotics, bacteriophage production, culture conditions 8347.
- Pseudoperonospora cubensis**,
 downy mildew, *Cucumis melo*, disease resistance 1356.
 downy mildew, disease resistance, *Cucumis sativus* 8609.
 downy mildew, *Luffa acutangula*, pollen, effects on, spore germination 5011.
 inoculation, *Cucumis melo* disease resistance 7752.
- Pseudoperonospora humuli**,
 downy mildew, epidemiology, weather, *Humulus lupulus* 3087.
 downy mildew, fungicides, disease control, *Humulus lupulus* 1403.
- Pseudopeziza medicaginis**,
 leafspot, *Medicago sativa* 5670.
 leafspot, *Medicago sativa*, USA, Wyoming 9330.
- Pseudorabies virus**,
 antibodies, pigs serum, detection, immunodiffusion 5374.
 antiviral activity, ribonuclease, pancreas, *Bacillus intermedius*, *Streptomyces amosus* 6077.
 electron microscopy, dipyrdimolamide, effects on 3356.
 inactivation, antiviral activity, halides 3353.
 infection, BHK-21 cells, antiviral activity, 9-(2-hydroxyethoxymethyl)guanine+amphotericin B 3351.
 susceptibility, α -interferon 6074.
- Pseudotsuga**,
 exudates, yeasts isolation, identification, host specificity 2295.
 root rot, mortality, forests 5075.
- Pseudotsuga menziesii**,
 brown rot, *Fibroporia angulopora* sp. nov. 8650.
 damping-off, *Fusarium oxysporum*, transmission (seed) 4149.
 decomposition, nutrient dynamics, nitrogen fixation, nitrogen-fixing bacteria 516.
 developmental stages, relationship, infectivity, *Phaeocryptopus gaumannii*, needlecast, USA, Washington 6928.
 ectomycorrhizas detection association, +*Pteridium aquilinum* undergrowth 4191.
 growth, mycorrhizas, soil properties effects on, burning 520.
 Laccaria laccata, effects on, growth 532.
 mycorrhizas, New Zealand 7774.
 needle cast, *Rhabdocline* 536.
 needlecast, *Rhabdocline pseudotsugae*, chemical control 2312.
Orygia pseudotsugata, biological control, nuclear polyhedrosis virus 8352.
Phaeocryptopus gaumannii infection, Canada 7785.
Phaeocryptopus gaumannii needlecast, disease control, aerial applications, chlorothalonil, USA, Washington 6879.
Phellinus weinii, infection, treatment, fumigants 545.
 plantations, needlecast, *Rhabdocline* *weirii* subsp. *oblonga*, *Rhabdocline pseudotsugae* subsp. *pseudotsugae* 5864.
 root rot, *Fusarium oxysporum*, protection, ectomycorrhizas, *Laccaria laccata* 3173.
 root rot, *Fusarium oxysporum*, suppression, ectomycorrhizas 4144.
 root rot, *Phellinus weinii* 5858.
 root rot, *Phellinus weinii*, disease spread 5072.
 roots, fungi infection, incidence 4162.
 roots, *Verticillium dahliae* wagenen black stain 9526.
 seedlings, fertilizer applications, *Laccaria laccata* inoculation 5852.
 seedlings, growth, mycorrhizas formation, soil properties 522.
 seedlings, growth, survival, inoculation, mycorrhizas 518.
 stands, biomass, nutrient cycles, mycorrhizas, fungi, USA, Oregon 6905.
 wood, antifungal agents fumigants, disease control, post-harvest decay 1468.
 wood, compression pressure tolerance, indicators, decay, *Poria placenta* 6935.
- Pseudowintera colorata**,
 polygodial biosynthesis, antifungal activity, *Candida albicans* 688.
- Psidium**,
 incidence, *Azospirillum*, rhizosphere microorganisms, tropical environment 7853.
- Pelia rosea**,
 biological control, *Entomophthorales*, field trials 9210.
- Peophocarpus tetragonolobus**,
 cucumber mosaic virus isolation, characterization, USA, Florida 1125.
 Phytophthora megasperma var. sojae soil isolates 432.
- Psoralea**,
 induction *Petroselinum hortense* cell culture, fungi infection 5765.
- Psorophora columbica**,
 biological control, *Bacillus thuringiensis* subsp. *israelensis*, paddy fields, *Oryza sativa* 6597.
- Psychrophilic bacteria**,
 spoilage, potatoes, vacuum packaging, nitrogen packaging 4883.
- Psychrotrophic bacteria**,
 analysis, milk products 6665.
 assays, comparison methodology, milk 1073.
 cheese production yield, effects on 4788.
 contamination, cream, pasteurization 8499.
 contamination, lipase, butter, off flavor 209.
 contamination, milk, buffaloes 7578.
 dairy products, heat resistance, incidence, identification 4814.
 enumeration, beef carcasses, chilling effects on 8476.
 food contamination, ice cream 7567.
 food contamination, milk, dairy products, reviews 226.
 glycosidases biosynthesis 5516.
 growth, inhibition, *Lactobacillus lactis*+potassium sorbate, milk 7579.

Psychrotrophic bacteria, (continued)

- growth, milk, dissolved oxygen, cold storage 239.
- growth, milk, storage 9273.
- lipase inactivation, pasteurization, milk 263.
- spoilage, fermented milk products, preservation, hydrogen peroxide + thiocyanic acid 6685.
- spoilage, meat, organoleptic properties 2038.

Psychrotrophic microorganisms,

- analysis, milk products 6665.
- role, taints, food 2909.

Pteridium aquilinum,

- Ascochyta pteridium, leaves lesions, measuring techniques, computer applications, video image analysis 4924.
- undergrowth, Abies concolor, Pseudotsuga menziesii, detection, ectomycorrhizas association 4191.

Pteridophyta,

- vesicular-arbuscular mycorrhizas, morphology 2327.

Pythoderma flava,

- metabolites excretion, antimicrobial activity 7956.

Public health,

- feces, Columbia, Cryptococcus neoformans association contamination 4457.
- Jamaica, Vibrio, pathogenicity, Crassostrea rhizophorae 8968.
- man, airborne microorganisms, fungi infection, wood, burning effects of 4454.
- man, bacteria contamination, lettuce juices 4792.
- man, contamination, food, water, sewage 5285.
- man, sewage sludge, viruses, bacteria 7192.
- microbial pollution, wells, man, coliforms, Nigeria 8067.
- surveys, meat contamination, Campylobacter fetus subsp. jejuni, Salmonella 1081.

Puccinia,

- infection, vegetables, plants, disease control 2267.
- leaf rust, Gramineae, disease resistance histology 2264.
- rust, Gramineae, monitoring, weather satellites 1166.
- rust, Gramineae, reproduction, genetic variance 1160.

Puccinia andropogonis,

- Poaceae, Africa, East 9365.

Puccinia arachidis,

- inoculation, Arachis hypogaea, host plants genotypes effects on urediniospores 5693.
- rust, Arachis, disease resistance 4082.
- rust, disease resistance, Arachis hypogaea 4083.
- rust, disease resistance, cultivars screening, Arachis hypogaea 9475.
- rust, survival, Arachis hypogaea, pathology 5679.

Puccinia chaeana,

- Poaceae, Africa, East 9365.

Puccinia coronata,

- crown rust, disease resistance, plant breeding, Festuca arundinacea 448.
- crown rust, Lolium, pathology 6768.
- infection, Lolium perenne, Lolium multiflorum, incidence, British Isles 5721.
- pathogenicity relationship, sexual reproduction, asexual reproduction, Rhamnus cathartica 9338.
- rust, Gramineae, reproduction, genetic variance 1160.
- virulence, Avena sativa, association disease resistance genes 5035.
- virulence, Avena sativa, disease resistance 8610.

Puccinia coronata f.sp.avenae,

- crown rust, Avena sativa, protein biosynthesis 3952.
- crown rust, disease resistance, phytoalexins, Avena sativa 1353.
- haustoria, interaction, Avena sativa, cells, ultrastructure 2136.
- rust, interaction, barley yellow dwarf virus, Avena sativa, pathology 344.
- virulence, Avena sativa 3942.

Puccinia coronata f.sp.lolii,

- crown rust, disease resistance, Lolium perenne, Lolium multiflorum 4079.

Puccinia dianthi,

- rust, disease resistance, Dianthus caryophyllus 8609.

Puccinia graminis,

- glucose assimilation 2388.
- plant diseases, host-pathogen interactions, epidemiology, genetic factors, books 9998.
- rust, disease resistance, Dactylis glomerata, screening, phenotypes, genotypes 6856.
- stem rust, disease resistance, genetic analysis, Triticum aestivum 1348.
- Triticum stem rust, disease control, Barbers vulgaris eradication, USA 1389.

Puccinia graminis f.sp.avenae,

- stem rust, Avena sativa, virulence 9352.
- stem rust, epidemiology, Avena sativa, USA, Texas, Mexico 4962.

Puccinia graminis f.sp.dactylidis,

- stem rust, genetic analysis, Dactylis glomerata 357.

Puccinia graminis f.sp.tritici,

- racess, stem rust, overwintering, Triticum aestivum, USA, Texas, Mexico 4961.
- racess, virulence, stem rust, Triticum aestivum 4958.
- stem rust, disease resistance, Triticum aestivum, genetic factors 3125.
- stem rust, Gramineae, reproduction, genetic variance 1160.
- rust, Triticum aestivum, structure relationship 351.
- stem rust, disease resistance, plant breeding, Triticum aestivum 8603.
- stem rust, disease resistance, role proteins metabolism, Triticum aestivum 4075.
- stem rust, disease resistance, Triticum aestivum, genetic analysis 453.
- stem rust, disease resistance, Triticum aestivum, genetic control 7731.
- stem rust, disease resistance, Triticum lurgidum, genetic control 7728.
- stem rust, pathogenesis, Triticum aestivum 9351.
- stem rust, photosynthesis inhibitors effects on, Triticum aestivum 3948.
- stem rust, strains, characterization, Triticum 3944.
- stem rust, Triticum aestivum, disease resistance, Hungary 7735.
- stem rust, virulence gene frequency, Triticum aestivum 5041.

Puccinia graminis subsp.graminicola,

- rust, Gramineae, evolutionary genetics, ecology 3004.

Puccinia helianthi,

- rust, disease resistance, germplasm screening, Helianthus annuus 4064.

Puccinia hordei,

- infection, Hordeum, haustoria formation 2133.
- leaf rust, disease resistance, association colonies abortion, Hordeum vulgare 4057.
- leaf rust, Hordeum, disease resistance genes, histology 2265.
- leaf rust, virulence, Hordeum vulgare 2121.
- pathogens, disease resistance, association, Hordeum spontaneum fertility 6759.
- plant diseases, Triticum, disease control, fungicides 5830.
- rust, disease resistance, Hordeum vulgare, P gene 1349.
- rust, interaction, barley yellow dwarf virus, Hordeum vulgare, pathology 344.

Puccinia hordei, (continued)

- spores, counting methods, spectrophotometry, I.R. radiation 3634.

Puccinia horiana,

- rust, Chrysanthemum 2204.
- rust, disease resistance, Chrysanthemum 8609.

Puccinia melanocephala,

- leaf rust pathogenesis, Saccharum officinale 5716.

Puccinia melanocephala,

- rust, pathology, Saccharum 1176.

Puccinia menthae,

- infection, Mentha, rust, pathogenicity, host specificity 431.

Puccinia polysora,

- rust, Zea mays, incidence, relationship, weather, USA, Indiana 6765.

Puccinia polysora,

- Zea mays rust, pathogenesis 1168.

Puccinia pseudocynodeni,

- Poaceae, Africa, East 9365.

Puccinia recondita,

- leaf rust, disease resistance, genetic variance, Triticum aestivum 1161.

Puccinia recondita var.tritici,

- leaf rust, infectivity, epidemiology, Triticum aestivum 370.

Puccinia recondita,

- rust, Gramineae, reproduction, genetic variance 1160.

Puccinia recondita f.sp.tritici,

- ureidina, growth rate, association, Triticum aestivum leaves 6748.
- amino acids, amidation, antifungal activity 2478.
- antifungal activity, pyrazoles derivatives 6875.
- leaf rust, disease control, triazubyl, Triticum aestivum 506.
- leaf rust, disease resistance, plant breeding, cultivars, Triticum aestivum 1338.
- leaf rust, temperature effects on infectivity, Triticum aestivum 3932.
- leaf rust, Triticum aestivum disease resistance, genetic control, computer applications, USA, North Dakota 7730.
- rust, interaction, barley yellow dwarf virus, Triticum aestivum, pathology 344.

Puccinia recondita var.tritici,

- brown rust, susceptibility, Triticum aestivum 3006.

Puccinia striiformis,

- plant diseases, staining methodology 6730.
- spores, counting methods, spectrophotometry, I.R. radiation 3634.
- stripe rust, disease control, sprays, Triticum aestivum 5722.
- stripe rust, disease resistance, Triticum, genetic analysis 1344.
- stripe rust, epidemiology, statistical analysis, Triticum aestivum 2125.
- stripe rust, Triticum, germplasm screening, field trials, disease resistance development, India 5726.
- stripe rust, yield, Triticum aestivum 1165.

Puccinia trititica,

- rusts, disease resistance, inheritance, Triticum aestivum 2255.

Pullulan,

- Aureobasidium pullulans, biosynthesis, fluorocetic acid effects on 6571.
- biosynthesis, Aureobasidium pullulans, colchicine induction 8336.
- production, Aureobasidium pullulans, factors affecting 2816.

Pullulanase,

- biosynthesis, Bacillus stearothermophilus 5509.
- extracellular enzymes, inducers, Enterobacter aerogenes 3680.
- yeasts, production 3691.

Pulp,

- fungi treatment, effects on paper 896.
- wood, hydrolysis, Trichoderma reesei cellulase 9256.

Pulp mills,

- industrial effluents, color removal, use, Coriolus versicolor 8961.
- industrial effluents, digestion (anaerobic), detoxification 4446.
- industrial effluents, Klebsiella pneumoniae microbial pollution, lakes 1715.
- industrial effluents, pigments removal, Coriolus versicolor, immobilized cells 8959.
- industrial effluents, wastewater treatment, environmental effects, bibliographies 2608.
- industrial effluents, wastewater treatment, fungi 6245.

Pulse radiolysis,

- superoxide dismutase kinetics, Paracoccus denitrificans 6540.

Pumpkin mosaic virus,

- effects on, primary production, Cucurbita maxima 2196.
- infection, Cucurbita maxima, transmission (horizontal), Aphis craccivora vectors 1231.

Punica granatum,

- leaf blotch, fruit rot, Coniella granati, Pestalotopsis versicolor 7680.

Pure culture,

- Bacteroides fragilis, Escherichia coli, metronidazole antibacterial activity 2447.
- Cronium ribicola hyphae, inoculation, Pinus lambertiana hypocotyls 542.
- hybridization, yeasts, wine production 140.
- rumen microorganisms, carbohydrates effects on cellulose digestion 8425.
- yeasts, hybridization selection, wine fermentation, sulfur dioxide tolerance 147.

Purines,

- biodegradation, Enterobacter cloacae, aerobic conditions 3794.
- biogenesis, host-parasite interactions, brevidin antimalarial activity, man 1589.
- metabolism, dogs, nutrient sources, microorganisms single-cell protein 3851.

Puromycin,

- resistance, enhancement mechanisms, genetic analysis, Escherichia coli 7894.

Purple blotch,

- Alternaria porri, incidence, Allium cepa, hybrids, cultivars, Brazil 7713.

Purple membrane,

- bacteriorhodopsin, photochemistry, I.R. spectroscopy, Halobacterium halobium 4554.
- bacteriorhodopsin, secondary structure, C.D., Halobacterium halobium 6393.
- retinal-binding protein purification, characterization, bacteriorhodopsin deficient mutant, Halobacterium halobium 4561.

Purple spot,

- Stemphylium vesicarium, pathology, Asparagus officinalis 1296.

Putidomonoxin,

- sodium dithionite reduction kinetics, Pseudomonas putida 2790.

Putidomonoxin-NAD⁺ reductase,

- putidomonoxin reduction kinetics, Pseudomonas putida 2790.

Pycnoporus sanguineus,

- serine carboxypeptidase, purification, characterization 6503.

Pyocine typing,

- Pseudomonas aeruginosa, nosocomial infection clinical isolates 1781.

Pyocins,

- Pseudomonas aeruginosa, antibacterial activity 8920.
- purification, characterization, Pseudomonas aeruginosa 2574.

- Pyrazinamidase**, assays, pyrazinamide drug resistance, *Mycobacterium tuberculosis* 9638.
- Pyrazinamide**, drug resistance, *Mycobacterium tuberculosis*, clinical isolates, Korea Rep. 9656.
- drug resistance, pyrazinamidase assays, *Mycobacterium tuberculosis* 9638.
- drug sensitivity testing, *Mycobacterium intracellulare*, infection, monkeys, clinical aspects 4265.
- 4-Pyrazolylsulfides**, antifungal activity, phytopathogenic fungi 6875.
- Pyrazophos**, antifungal activity, tolerances, *Ampelomyces quisqualis* 1401.
- use, ornamental plants disease control 5056.
- Pyrenochaeta lycopersici***, corky rot, *Lycopersicon esculentum* 1264.
- root rot, fungicides disease control, *Lycopersicon esculentum*, *Solanum melongena* 6872.
- Pyrenochaeta terrestris***, experimental infection, effects on, yield, *Allium cepa* 2191.
- Pyrenochaeta terrestris***, pink rot, *Allium cepa*, new records, Sudan 1277.
- Pyrenomyces***, new records, *Metrosideros collina* subsp. polymorpha infection, pathogenicity 4147.
- Pyrenopeziza brassicae***, leafspot, fungicides, disease control, *Brassica oleracea* 2276.
- Pyrenopeziza bromi***, brown spot, disease resistance, *Bromus inermis*, inheritance 6868.
- leafspot, screening, disease resistance, *Bromus inermis* 9458.
- Pyrenopeziza graminea***, infection, disease control, heat treatments, *Hordeum vulgare*, seeds 1430.
- leaf stripe, seed treatments, *Hordeum vulgare* 1435.
- Pyrenopeziza teres***, infection, defense mechanisms, leaves, *Avena sativa* 1356.
- infection, disease control, heat treatments, *Hordeum vulgare*, seeds 1430.
- net blotch, *Hordeum vulgare*, fungicides effects on 7770.
- pathogens, disease resistance, association, *Hordeum spontaneum* fertility 6759.
- Pyrenopeziza teres f.sp. maculata***, spot, *Hordeum vulgare* 5703.
- Pyrenopeziza tritici-repentis***, infection, Triticum, yellow spot effects on yield 4956.
- spot, Triticum aestivum, incidence, Colombia, Ecuador, Peru 9356.
- yellow spot, epidemiology, yield, Triticum aestivum 8547.
- Pyricularia grisea***, blast, pathogenicity, *Lolium multiflorum* 1178.
- infection, *Lolium*, disease resistance 1363.
- infection, susceptibility, *Stenotaphrum secundatum* Germplasm 7665.
- Pyricularia oryzae***, antifungal activity, N-benzylthiocarbamic acid derivatives 9678.
- antifungal activity, 3-aryl-2-arylimino-4,5-disubstituted- Δ^4 -thiazolines 4318.
- blast, cultural characteristics, relationship pathogenicity, *Oryza sativa* 5699.
- blast, epidemiology, relationship, meteorology, *Oryza sativa* 1182.
- blast, fungicides disease control, *Oryza sativa* 8630.
- blast, fungicides resistance, measuring techniques, in vitro 7892.
- blast, *Oryza sativa*, antifungal agents effects on pathogenesis 5827.
- blast, *Oryza sativa* disease resistance, USA 5711.
- blast, *Oryza sativa*, environmental conditions effects on pathogenesis 1169.
- blast, *Oryza sativa*, fungicides 2274.
- flavoprotein-linked monooxygenase, biodegradation IBP 5590.
- host-parasite interactions, *Oryza sativa*, phytoalexins, isolation, identification 52049.
- leafspot, hypersensitive response, lesions, *Oryza sativa* 5039.
- Pyricularia pennisi***, leafspot, *Pennisetum typhoides*, air spora, analysis 4000.
- Pyridine nucleoside transhydrogenase***, multiple forms, oxygen effects on, *Azotobacter vinelandii* 6405.
- Pyridines***, coenzymes, biosynthesis, *Aspergillus* 3689.
- Pyridinecarboxylic acid***, derivatives, antibacterial activity 5190.
- derivatives, antibacterial activity, *Pseudomonas aeruginosa*, *Enterobacteriaceae* 7086.
- Pyridoxal 5'-phosphate***, binding tryptophan synthase, N.M.R., *Escherichia coli* 4628.
- chemical modification, glutamate synthase (NADPH), *Escherichia coli* 5488.
- Pyridoxaminephosphate oxidase***, amines activation, mechanisms, yeasts 6553.
- purification, characterization, *Saccharomyces cerevisiae* 942.
- Pyridoxine***, bioassays, *Kloeckera brevis*, *Saccharomyces uvarum* 2717.
- (2-Pyridylthio)methyl benzoate N-oxides, antifungal activity, *Alternaria solani*, *Phytophthora infestans* 5204.
- Pyrimidine nucleoside***, phosphorus analogs, cytidine deaminase inhibition, *Escherichia coli* 69.
- Pyrimidines***, biosynthesis, gluconimycin inhibition, *Bacillus subtilis* 8014.
- biosynthesis, *Neisseria meningitidis*, enzymes activity 8340.
- biosynthesis, *Neisseria meningitidis*, enzymes regulation 8341.
- Pyrite***, Thioacidobacteria ferrooxidans oxidation, solubilization, iron valency 8709.
- Pyrogeiell***, production, *Citrobacter*, gallate decarboxylase 3731.
- Pyrodictases***, mycorrhizas, ecophysiology, nutrient transport, absorption, nitrogen sources, phosphate 9538.
- Pyrolysis***, activated sludge 4449.
- actin bacteria, mass spectrometry, association, identification 3610.
- 2-Pyruvate-4,6-dicarboxylic acid***, biosynthesis, *Pseudomonas testosteroni*, gallic acid catabolism 1849.
- 1-Pyruvate-5-carboxylate dehydrogenase***, +proline dehydrogenase purification, characterization, *Pseudomonas aeruginosa* 1908.
- Pyruvate-5-carboxylate reductase***, gene mapping, protein biosynthesis, purification, *Escherichia coli* 1830.
- Pyroplasm***, production, *Mycoplasma fulvus*, physicochemical properties 1653.
- Pyrrholo-quinoline semiquinone***, role alcohol dehydrogenase (acceptor) mechanisms, R.S.R., *Hyphomicrobium* 2789.
- Pyrrus***, *Erwinia amylovora* isolation, characterization 419.
- fireblight, *Erwinia amylovora*, bactericides, disease control 1207.
- Pyrrus communis***, decline, pathology, etiology 3024.
- scab, *Venturia pinna*, disease control, urea, fenarimol, baycor 1395.
- stem rot, *Alternaria alternata*, association, benomyl, disease control, blue mold, *Penicillium expansum* 9373.
- Pyruvate***, levels, effects on 1-hydroxy-1-phenylpropanone, production, *Saccharomyces cerevisiae* 7501.
- Pyruvate carboxylase***, *Aspergillus nidulans*, localization methodology 8321.
- purification, characterization, kinetics, *Pseudomonas deoformans* 6454.
- Pyruvate decarboxylase***, activity, 1-hydroxy-1-phenylpropanone production, *Saccharomyces cerevisiae* 7501.
- Zymomonas mobilis*, purification, characterization, association, ethanol production 6487.
- Pyruvate dehydrogenase***, activity, *Bacteroides fragilis*, relationship, metronidazole susceptibility 7089.
- multienzyme complexes, mechanisms, mathematical models, *Escherichia coli* 7311.
- multienzyme complexes, purification, characterization, *Neurospora* 4643.
- multienzyme complexes, purification, characterization, *Escherichia coli* 4644.
- multienzyme complexes, purification, characterization, *Bacillus* 4645.
- multienzyme complexes, purification, characterization, *Hansenula* 4646.
- multienzyme complexes, purification, characterization, *Bacillus subtilis* 5524.
- multienzyme complexes, subunits molecular weight, kinetics, comparison *Saccharomyces cerevisiae*, *Saccharomyces cerevisiae* 52.
- Pyruvate kinase***, binding ADP, phosphoenolpyruvate, fructose-1,6-diphosphate, valine, *Neurospora crassa* 1931.
- isoenzymes, purification, characterization, *Escherichia coli* 6422.
- purification, characterization, *Streptococcus lactis* 6421.
- Streptococcus sanguis*, purification, activity 2778.
- variants, purification, characterization, *Neurospora crassa* 5495.
- Pyruvic acid***, biosynthesis, *Debaryomyces hansenii*, Citrus extracts fermentation 1822.
- effects on *Lactobacillus*, production, acetoin, 2,3-butanedione 4721.
- electrodes, use, *Streptococcus faecium* 8119.
- production, propylene glycol conversion 3652.
- production, *Streptophyllum commune* 3650.
- Pyruvic oxime***, denitrification, *Alcaligenes*, nitric-oxide reductase, nitrate reductase, soil 596.
- Pythium***, antifungal activity, metalaxyl 481.
- antifungal activity, propamocarb, disease control, *Lycopersicon esculentum* 502.
- blight, pathology, *Gramineae*, *Pythium* 5714.
- blight, *Phaseolus vulgaris*, disease control, metalaxyl 9493.
- contamination, association, *Phytophthora megasperma f.sp. glycinea*, isolation methodology 589.
- infection, *Gramineae*, fungicides treatment 4114.
- infection, plants seedlings, greenhouses, damping-off 1265.
- plant diseases, roots, crops, greenhouses, USA, North Carolina 9411.
- root rot, *Phaseolus vulgaris*, incidence, USA, Wisconsin, bioassays 3923.
- rot, biological control, association, *Pseudomonas antagonism*, *Trichoderma hamatum*, *Atium* seeds 5820.
- rot, biological control, *Enterobacter cloacae* seed treatments, *Beta vulgaris*, *Cucumis sativus*, *Pisum sativum* 9481.
- soil-borne diseases, *Gossypium hirsutum* seedlings 1266.
- source, dispersal, soil, greenhouses 3898.
- Pythium aphanidermatum***, inoculum density, *Beta vulgaris*, crop fields, irrigation, USA, Arizona 426.
- Pythium aphanidermatum***, antifungal activity, quinterozone 5062.
- culture filtrates, *Elidens pilosa* tissue culture, 1-phenylhepta-1,3,5-triene accumulation 5754.
- damping-off, *Brassica* seedlings, new records, Singapore 1259.
- damping-off, integrated control, herbicides, fumigation, crop rotation, soil fumigation, *Cucumis sativus* 9473.
- fruit rot, *Benincasa hispida*, pathogenesis 3099.
- pathogenicity, soil-borne diseases, *Euphorbia lathyris* 5002.
- phytooxins, isolation, biochemical analysis, characterization 1098.
- Pythium apterulorum***, decomposition, leaf litter, *Nymphoides peltata* 5070.
- Pythium diclinum***, decomposition, leaf litter, *Nymphoides peltata* 5070.
- decomposition, leaf litter, *Nymphoides peltata* 5070.
- Pythium intermedium***, infection, *Pseudotsuga menziesii* roots, incidence 4162.
- Pythium irregulare***, antifungal activity, N-benzylthiocarbamic acid derivatives 9678.
- damping-off, integrated control, herbicides, nematodes, crop rotation, soil fumigation, *Cucumis sativus* 9473.
- infection, *Avena*, *Gaeumannomyces graminis* suppression, soil, effects on 3205.
- infection, *Gramineae*, *Gaeumannomyces graminis* suppression, soil, effects on 3207.
- infectivity, roots, *Trifolium repens* 350.
- Pythium marisiprum***, decomposition, leaf litter, *Nymphoides peltata* 5070.
- Pythium myriothlyum***, disease resistance, germplasm, *Arachis hypogaea* 9474.
- pod rot, *Arachis hypogaea*, nematode soil disease control 1411.
- Pythium periclitum***, decomposition, leaf litter, *Nymphoides peltata* 5070.
- Pythium splendens***, *Brassica actinophylla* seedling blight, etiology, disease control, USA, Hawaii 4996.
- suppression, germination, growth, pasture soil 9551.
- Pythium ultimum***, biological control, role, *Glodidactylus virens*, *glodivins* 5831.
- blight, *Agrostis palustris*, predictions, climatic conditions 9362.
- damping-off, etiology, disease control, *Cicer arietinum* 3911.
- damping-off, inhibition, *Agrobacterium radiobacter* Polysaccharides seed

Pythium ultimum, (continued)

- treatments, *Beta vulgaris* 7710.
- inoculum density, relationship, Glycine max damping-off 348.
- population dynamics, growth, soil, water potential 4228.
- root rot, dincoseb, treatment, *Phaseolus vulgaris* 1387.
- root rot, interaction stem rot, *Rhizoctonia solani*, *Pisum sativum* 9328
- stem rot, wounds healing, cuttings, *Pelargonium* 5745.
- virulence, *Phaseolus vulgaris*, comparison *Aphanomyces euteiches* f.sp.phaseoli 347.

Quality control,

- aflatoxins contamination, peanuts 2940
- antibiotic sensitivity testing, agar diffusion test 713
- antibiotic sensitivity testing, nortioxacin 9672.
- bacteria, contamination, milk 4834.
- batch culture, *Saccharomyces cerevisiae*, population dynamics 3818.
- clinical microbiology, British Isles 711.
- clinical microbiology, laboratories 710.
- disc-diffusion test, antibiotic sensitivity testing 2514.
- feeds contamination, microorganisms, toxins 4862.
- food contamination, ice cream, food industry 259.
- food industry, food-borne diseases 7575.
- meat products, microorganisms food contamination 7566.
- media (selective), bacteria, fungi, molds 7212.
- moxalactam, disc-diffusion test, antibiotic sensitivity testing 9745.
- plants pathogens, seed-borne diseases, assays 2968
- seafood, resazurin test, food contamination, bacteria 3374.
- serological tests reagents, contamination, bacteria, viruses 5229.
- water, microbial pollution 4452.

Quaternaria quaternata,

- infection, association *Phyllaphis fagi* outbreaks, *Fagus* 3166.

Quaternary ammonium compounds,

- antiviral activity 1571.
- disinfection, hand, man 816.
- teat dips, antibacterial activity, disease control, mastitis, cattle 1728.

Quazatine,

- resistance, *Penicillium italicum*, New Zealand 7880.

Quercus,

- Daedalea quercina* infection 3176.
- decay, *Fistulina hepatica*, economic importance, Czechoslovakia 4163.
- etiology, rust, *Cronartium quercuum* f.sp.fusiforme, ascospores, inoculum 2322.
- exudates, yeasts isolation, identification, host specificity, population dynamics 4295
- mortality, *Hyphoxylon atropunctatum* canker, association drought 5074.
- seedlings, *Cronartium quercuum* f.sp.fusiforme rust, ascospores inoculum 544.
- wilt, epidemiology, disease spread 1462.
- wood, extracts, inhibition, *Hyphomycetes*, growth, spore germination 4180.

Quercus alba,

- Inonotus dryophilus* white rot, decay association 5880

Quercus lanuginosa,

- Tuber melanosporum fruit bodies production, fertilization, irrigation 6899.

Quercus macrocarpa,

- Inonotus dryophilus* white rot, decay association 5880.

Quercus robur,

- decay fungi, *Basidiomycetes*, ecological distribution 4158.
- forests, fungi, plant diseases, mortality, pollution effects, air pollution 6926.
- frost damage, association *Bjerkandera adusta* decay 6921.
- roots, wood, *Basidiomycetes* decomposition, population dynamics, nutrient cycles 5861.
- roots, wood, decomposition, *Basidiomycetes* 5861.
- wood, decomposition, *Basidiomycetes*, spatial distribution 5860.

Quercus rubra,

- forests, fungi, plant diseases, mortality, pollution effects, air pollution 6926.
- frost damage, association *Bjerkandera adusta* decay 6921.

Quercus serrata,

- root rot, *Rhizoctonia solani*, growth conditions 6915.

Quercus velutina,

- seedlings, water relations, water potential, ectomycorrhizas, *Pisolithus tinctorius* 9508

Quercus virginiana,

- Ceratocystis fagacearum* decline, carbohydrate analysis 1456.

Quillaja saponaria,

- leaf litter, decomposition, soil microorganisms, nitrogen cycle 2362.

Quinazoline,

- derivatives, antifungal activity 9490.

Quinazolones,

- antibacterial agents 5186.

Quinoxalones,

- antifungal activity 2476.

Quinidine,

- conversion, *Hansenula anomala* var.schneegii 6647.

Quinolines,

- derivatives, BAY 09867, antibacterial activity, bacteria, clinical isolates 5171.

8-Quinolinol,

- propionic acid treatment, feeds preservation, fungi biodegradation 5630.

4-Quinolnols,

- synthesis, biocides 5224.

Quinolones,

- M.K. 0366, antibacterial activity 6055.

Quinone,

- derivatives, antibacterial activity comparison 8761.

Quinone,

- conversion quinidine, *Hansenula anomala* var.schneegii 6647.

Quinones,

- derivatives, *Echiumycopsis* cell culture, antibacterial activity 673.

Quintozene,

- antifungal activity, *Pythium aphanidermatum* 5062.
- effects on ultrastructure, *Mucor mucedo*, *Phytophthora cactorum* 4124.
- +ferbam, disease control, *Fusarium oxysporum*, bulbs, *Lilium* 1427.
- resistance, growth rate, *Rhizoctonia solani* 4268.

(4R,6R)-(+)-8,8-Oxidomenthyl-en-9-ol,

- production, *Streptomyces bottropensis*, (-)-cis-carveol conversion 3732.

Rabbits,

- animal models, immunogenicity, *Leptospira interrogans* vaccines 3455.
- animal models, pencycuron toxicity, *Mammalia* 3155.
- ileum, *Escherichia coli* enterotoxins assays 310
- immune serum, immunoglobulin G antibody response, *Bacillus anthracis*, enzyme immunoassay detection 855.

Rabies,

- vaccines production, diploids cell culture 8922.

Rabies virus,

- antiviral activity, methisoprinol, BHK-21 cells 7100.
- antiviral agents effects on replication 6068.
- glycoproteins analogs gene expression, *Escherichia coli* 8046.
- purification, centrifugation 3522.
- vaccines production, BHK cells 7190.
- vaccines, use enzyme-linked immunosorbent assay 820.

Racemization,

- siderochelin A 1651.

Radiation,

- chickens carcasses, effects on food contamination, *Enterobacteriaceae*, *Salmonella* 4786.
- detoxification, endotoxins, lipopolysaccharides, bacteria 6728.
- disinfection, feeds, microorganisms distribution 7605.
- electrons, disinfection, sewage sludge 8927.
- immobilization methodology, *Aerobacter aerogenes* exo-maltohexaohydrolase 9177.
- polymerization, immobilization, *Streptomyces phaeochromogenes* 9876.
- polymerization, use, *Trichoderma reesei* immobilization 7262.
- soils (loam), effects on survival, mycorrhizas 1481.
- treatment, association, ice cream production, pistachios contamination, microorganisms 4838.
- treatment, meat, *Salmonella* control, reviews 8481.

α Radiation,

- aflatoxin B1 detoxification, mutagenicity testing 3879.
- damage, *Vibrio*, antibiotics resistant mutant effects on 6026.

γ Radiation,

- effects on chickens feeds, disinfection, storage 8492.
- effects on cytokinins, mushrooms, food spoilage 3816.
- + heat treatments + chemicals, control, *Rhizopus nigricans* post-harvest decay, tomatoes 2237.
- inactivation, viruses, laboratories, effluents 790.
- induction mutants, *Lactobacillus bulgaricus*, *Lactobacillus casei*, milk, acid production, proteolytic enzymes activity 8200.
- pathogens reduction, disinfection, sewage sludge 8935.
- phase λ mutagenesis 1560.
- pretreatment, bagasse, cellulase production, *Trichoderma reesei* 8449.
- sterilization media (culture) equipment 707.
- sterilization, medical importance 9707.
- sterilization, milk 8496.
- viruses proteins radioactive labelling, methodology 1761.

γ Radiation,

- Allium cepa seeds, effects on white rot incidence 1426.

Radioactivity

- tobacco mosaic virus, radioactive labelling, measuring techniques, enzyme-linked immunosorbent assay 8098.

Radioassays,

- Rhizobium meliloti* polysaccharides 3589.

Radioimmunoassay,

- amatoxin, Amanita 2954.
- antibiotics, body fluids 9724.
- comparison enzyme immunoassay, detection, hepatitis B surface antigen 7220.
- coxsackievirus B4, coxsackievirus B5, antigens cross-reactivity 8099.
- detection, antibodies, mouse hepatitis virus 7232.
- detection, *Bordetella pertussis* antibodies, cattle 1789.
- detection, calcivirus, feces 9847.
- detection, hepatitis B surface antigen, coagulation, inhibition 828.
- detection, hepatitis B virus albumin receptors 6295.
- detection, immunoglobulin G, cytomegalovirus 5375.
- detection, varicella-zoster virus 6294.
- diagnosis, brucellosis, cattle 4485.
- Ebola virus 3540.
- hepatitis B surface antigen, standardization 3526.
- interferon antiviral activity 1759.
- leprosy, epidemiology, man 848.
- measles virus 6289.
- neocarzinostatin 9202.
- serum levels, gentamicin, clinical aspects 3413.
- solid phase methods, detection, *Mycoplasma pneumoniae* antibodies 9870.
- solid phase methods, *Escherichia coli* lipopolysaccharides 9296.
- solid phase methods, hepatitis B surface antigen, factors affecting 821.
- solid phase methods, soybean mosaic virus detection, Glycine max seeds 5368.
- solid phase methods, *Staphylococcus aureus* enterotoxin C 9295.
- soybean mosaic virus, seed-borne diseases, Glycine max 1316.
- Vibrio cholerae* toxins, *Escherichia coli* enterotoxins 9294.
- woodchuck hepatitis virus detection, hepatitis B virus antigens, antibodies cross-reactivity use 9861.
- zearalenone 2066.

Radioimmunosorbent test,

- detection, lettuce mosaic virus, *Lactuca sativa* seeds 1754.

Radiometry,

- detection, *Mycobacterium* 9933.
- immunoassays, detection poliovirus antibodies 1758.
- measuring techniques, *Mycobacterium* fatty acids metabolism 837.
- Mycobacterium* detection 9926.

Radioreisistance,

- Micrococcus* isolation, poultry, environmental effects 202.
- mutants, *Bacillus subtilis*, *Bacillus thuringiensis* var.galleriae, isolation, characterization 7027.
- Pichia guilliermondii*, serotonin effects on 7025.
- U.V. radiation, *Aureobasidium pullulans*, ploidy effects on 2395.

Radiorepirometry,

- methodology, sulfate-reducing bacteria, antibacterial agents evaluation 6320.

Radiosensitivity,

- Aspergillus versicolor*, association food contamination 8787.

Radiosensitization,

- p-hydroxybenzoic acid, *Staphylococcus aureus* 5173.
- toxicity, misonidazole, m-AMSA, effects on, *Escherichia coli* 666.

- Radish mosaic virus**, infection, Cruciferae 3082.
infection, susceptibility, *Raphanus sativus* 9436.
- Radishes**, refrigeration, nitrate-reducing bacteria growth 3836.
- Radium**, adsorption, microorganisms biomass wastes quantification 9828.
- Rain forests**, nitrogen cycle, nitrogen fixation, denitrification 3207.
- Rain water**, *Pseudomonas syringae* dissemination, *Prunus cerasus*, monitoring methodology 6785.
- Rainfall**, effects on, pathogenesis, *Phytophthora parasitica* var. *nicotianae*, black shank, *Nicotiana tabacum* 3050.
Pseudocercospora helipotrichoides, spores dispersal, disease spread, eyespot, *Triticum aestivum* 5727.
Pseudocercospora helipotrichoides, spores dispersal, isolation, soil 5921.
- Rainfall levels**, acidity, effects on nutrient balance, soil microorganisms 9514.
- Ramalinae farinaceae**, vanillic acid biosynthesis 3649.
- Raman spectroscopy**, azobenzene coordination geometry, copper active sites, *Pseudomonas aeruginosa* 9.
carotenoproteins, spirilloxanthin configurations, *Rhodospirillum rubrum* 6625.
ferredoxin, *Halobacterium halobium* 4558.
laccase, *Polyporus versicolor* 9148.
- Ramularia**, plant diseases, ecological distribution, France 2207.
- Rangelands**, cattle dung, decomposition 3198.
- Raphanus sativus**, clubroot, pathogenicity, association, soil moisture, soil temperature 6815.
disease resistance, scab, *Streptomyces scabies* 2268.
radish mosaic virus infection, susceptibility 9436.
- Raphiopsis leucocurti**, leafspot, *Entomospodium mespilii* 5775.
- Raphiopsis indica**, leafspot, *Entomospodium mespilii* 5775.
- Rapid plasma reagin test**, immunodiagnosis, syphilis 9913.
immunodiagnosis, syphilis 9917.
- Rapaport's medium**, use, media (isolation), methodology, *Salmonella* 8111.
- Rare species**, plants, fungi diseases, USSR 7646.
- Raspberry bushy dwarf virus**, etiology, yellows, *Rubus*, disease resistance 464.
infection, *Rubus idaeus* fields 9441.
- Ratoon stunt**, bacteria, effects on, *Saccharum officinale*, yield 2139.
bacteria, *Saccharum*, disease control, heat treatments 9468.
mycoplasma-like organisms, bacteria, *Cynodon dactylon*, etiology 3009.
- Rauscher leukemia virus**, glycoproteins, antigenic determinants, molecular weight, monoclonal antibodies, precipitation, methodology 1748.
- Reavella isgerheimiana**, infection, *Enterobacterium cyclocaurum*, fungicides, disease control 8656.
- Ravidomycin**, antibacterial activity, gram-positive bacteria 6210.
- RD-114 virus**, infected cell lines, interferon, antiviral activity 9699.
- Reaction centers**, cytochrome c binding sites, cross-linking dithiobispropionimidate, dimethyl suberimidate, *Rhodospseudomonas sphaeroides* 3651.
purification, thylakoids, *Rhodospseudomonas viridis* 6392.
- Reaction mechanisms**, immobilized enzymes, surface charge effects on 967.
- Reactors**, continuous culture, nitrifying bacteria, wastewater treatment, dissolved oxygen effects on 1705.
ethanol biosynthesis, yeasts 139.
factors affecting, growth, thermus, *Bacillus*, methodology 1794.
films, nitrification, mathematical models 8057.
growth, *Saccharomyces cerevisiae*, population dynamics, mathematical models 3633.
methane, mathematical models, digestion (anaerobic), bacteria 5308.
methanogenesis, methodology, fermentation 8716.
Rhodospseudomonas capsulata chromatophores, ATP measurement 4482.
sewage treatment, methane biosynthesis, bacteria 4435.
wastewater treatment, biological oxygen demand, microorganisms 5310.
wastewater treatment, mathematical models 1688.
wood hydrolysis, cellulase recycling 8445.
- Reagents**, serological tests, quality control, contamination, bacteria, viruses 5229.
- Rearing**, methodology, *Heliothis amigeri* confertus, nuclear polyhedrosis virus, granulosis virus 1738.
- Receptors**, *Escherichia coli* pili, identification, hemagglutination, blood group P1 5402.
hepatitis B virus, albumin, detection, radioimmunoassay 6295.
phyto toxins, plasma membranes, pathogens, plant diseases, reviews 2096.
specificity agglutination, use, identification, *Escherichia coli* + pili 880.
- Recilia dorsalis**, disease transmission, rice gall dwarf virus, *Oryza sativa* 1162.
- Reclaimed land**, coal mines, iron-oxidizing bacteria, vertical distribution levels 9561.
- Recombinants**, *Nocardia mediterranei*, rifamycins biosynthesis 6164.
- Recreation**, environmental impact, soil properties, forests 6892.
- Recreation sites**, swimming, microbial pollution, phages, *Escherichia coli* 8970.
viruses, water-borne diseases, wastewater treatment effects on 9810.
- Red clover mottle virus**, stability, infectivity, factors affecting, *Pisum sativum* 2099.
- Red clover vein mosaic virus**, plant viruses, Leguminosae, USA, Tennessee, identification 5689.
- Red core**, *Fragaria vesca*, disease control, agricultural practices association, dazomet, lenamino-sulf 1415.
- Redmouth**, *Yersinia ruckeri*, immunogenicity, vaccines, bacterins preparation 8925.
- Redox properties**, *Desulfovibrio desulfuricans* cytochrome c553, *Pseudomonas aeruginosa* cytochrome c551 6546.
hydrogenase, E.S.R., *Desulfovibrio gigas* 4634.
nitrogenase, *Azotobacter vinelandii* 9162.
- Reducing sugars**, dinitrosalicylic acid assays, interference cations, media (culture) 8085.
- Reduction**, iron, soil, flooding, metabolism, bacteria 6959.
ketones, *Beauveria ulfarum* 130.
Saccharomyces cerevisiae, perfluoroalkyl ketones, β -(perfluoroalkyl)- β -ketoesters, (perfluoroalkyl)vinyl compounds 9221.
- Reforestation**, *Pinus sylvestris*, survival, blight, *Phacidium infestans*, canker, *Gremmeniella abietina* 4164.
- Refrigeration**, effects on infectivity, potato leaf roll virus, antigenic characteristics, *Solanum tuberosum* 9422.
Escherichia coli, *Salmonella typhimurium*, viability, food films, surfaces 2025.
gases composition, spoilage, seafood 5640.
lettuce, radishes, nitrate-reducing bacteria growth 3836.
meat, spoilage, *Staphylococcus aureus*, psychrotrophic bacteria, yeasts 2038.
milk, pasteurization, bacteria, spoilage 2913.
preservation, poultry 3859.
Salmonella typhimurium, *Staphylococcus aureus*, growth, mayonnaise, meat 229.
storage, milk, bacteria growth 4826.
storage, milk, *Pseudomonas* growth 4830.
vacuum packaging, beef, spoilage, *Enterobacteriaceae* 5638.
- Regeneration**, *Abies alba* forests, association, soil microorganisms, mycorrhizas 534.
association, meristem tip culture, elimination, viruses, infection 469.
- Regurgitation**, *Epilachna varivestis*, *Cerotoma trifurcata*, feeding, disease transmission, southern bean mosaic virus, *Phaseolus vulgaris* 6738.
- Relative humidity**, effects on, *Alternaria solani*, infection, wound healing, *Solanum tuberosum* 4003.
effects on *Eucalyptus* leaf litter biodegradation 153.
effects on, occurrence, ochratoxin A, *Aspergillus ochraceus*, *Penicillium viridicatum* 7624.
effects on, pathogenesis, *Cercospora zeae-maydis*, leafspot, *zea mays* 2135.
effects on, powdery mildew, *Begonia* 401.
effects on *Stemphylium botryosum*, leafspot, pathogenesis, *Medicago sativa* 1141.
effects on, virulence, *Culex pipiens*, *Anopheles stephensi*, *Metarrhizium anisopliae*, conidia, viability 7478.
ethylene oxide sterilization, effects on indicator species, *Bacillus subtilis* subsp. *niger* 4322.
Piper nigrum leafspot, effects on, *Xanthomonas campestris*, pv. *vesicatoria*, pathogenicity 410.
scab, *Malus*, effects on pathogenesis 2149.
sclerotia, *Sclerotium rolfsii*, *Verticillium albo-atrum*, methyl bromide + chloropirin, effects on toxicity 499.
- Remantandine**, drug resistance, influenza A virus, plaque assay 9635.
drug resistance, production, influenza A virus, variants, methodology 1546.
influenza drug resistance, lipid membranes interaction 3266.
- Remote sensing**, soil microorganisms, respiration, soil properties, tundra 5885.
- Renal failure**, mushroom poisoning, *Cortinarius speciosissimus*, case reports, man 227.
- Renibacterium salmoninarum**, media (selective), methodology 5427.
- Repellents**, docosanoic acid, polygodial, *Myzus persicae*, vectors, viruses, plant diseases 459.
- Replica plating**, microorganisms, phenanthrene metabolism, detection, enumeration 3577.
- Replication**, avian sarcoma virus, antiviral activity, aphidicolin 3341.
cucumber green mottle mosaic virus, nitrates nutrition effects on, *Cucumis sativus* 2183.
DNA fragments, *Streptomyces* antibiotics, association oleandomycin biosynthesis 8006.
Epstein-Barr virus, antiviral activity, nucleosides analogs 9688.
herpes simplex virus, antiviral activity, 9-(3,4-dihydroxybutyl)guanine 5216.
herpes simplex virus 1, antiviral activity, tromantidine 1574.
herpes simplex virus, 9- β -D-arabinofuranosyl-2-fluoroadenine inhibition, HeLa cells 7104.
herpesvirus, antiviral activity, 9-(2-hydroxyethoxymethyl)guanine 7940.
9-(2-hydroxyethoxymethyl)guanine, antiviral activity, inhibition, herpes simplex virus 1, herpes simplex virus 2 7112.
inhibitors, viruses, plants 3156.
interferon, inhibition, murine sarcoma virus 7113.
Nicotiana tabacum, protoplasts, secretions, inhibition, tobacco mosaic virus 3114.
novobionin, inhibition, cytomegalovirus infected embryo fibroblasts 2489.
prostaglandins, inhibition, vaccinia virus, fibroblasts, cell culture 2485.
Pseudomonas, *Nicotiana tabacum*, factors affecting host-parasite interactions 5816.
rhabdovirus, antiviral agents effects on 6068.
rhinovirus, inhibition, dichloroflavan 6070.
tobacco mosaic virus, pathogenesis, *Nicotiana tabacum* 4038.
tobacco mosaic virus, ribonuclease inhibition, *Nicotiana tabacum* 6865.
Varicella-zoster virus, infected cells, 5-iodo-2'-deoxyuridine pretreatment effects on 3365.
viruses, nucleosides analogs inhibition 3352.
- Replicative intermediates**, *Mycoplasma* latexes-laidlawii DNA, chloramphenicol effects on biosynthesis 1625.
- Reproduction**, *Heliothis zea* nuclear polyhedrosis virus effects on, pest control, *Heliothis* 1041.

Reproduction, (continued)

influenza virus, proteinase inhibitors, antiviral activity 9686.
powdery mildew, survival, Hordeum infection 358.
Puccinia, rust, Gramineae, genetic variance 1160.
Solenopsis invicta, avermectin inhibition, pest control 1964.
stages, suppression, Leptosphaeria maculans, chemicals treatment, Brassica napus
crop residues 463.

Reproductive strategy,

evolution, Agarcales, Gasteromycetes, ectomycorrhizas 9535.
natural selection, pathogens, plant diseases, mathematical models 2976.
soil microorganisms, natural selection 2336.

Resaaurin test,

quality control, seafood, food contamination, bacteria 3374.

Research programs,

agricultural practices, symbiosis, Leguminosae, Rhizobium, Latin America 3227.
biological control, vectors, disease transmission, insects 1029.
developing countries, Bacillus thuringiensis, biological control, insects 1027.

Reservoirs,

infection, viruses, physicochemical properties, biochemical analysis 795.
viruses, Fragaria ananassa disease control relationship, Nematoda
1,3-dichloropropene pest control 9479.

water isolates, Vibrio cholerae, antibiotic sensitivity testing 7968.

Residues,

chlorothalimil, Solanum tuberosum foliage, mathematical models, fungi 5819.

Resins,

immobilized cells, Zymomonas mobilis, use, bioreactors, ethanol production 9250.

Resistant mutant,

agron, Agrobacterium, mutation frequency 2417.
S-(2-aminoethyl)-L-cysteine, Streptomyces clavuligerus, association, β -lactam
antibiotics biosynthesis, aspartate kinase regulation 8809.
antibiotics, Vibrio, effects on α radiation damage 6026.
Bacillus subtilis, S-(2-aminoethyl)-L-cysteine, L-lysine excretion 9122.
ethionine, Serratia marcescens, threonine biosynthesis 4580.
methionine analogs, Cephalosporium acremonium, cephalosporin C biosynthesis 4338.
seedling, antibiotic F 16-2, Lactobacillus sake, Saccharomyces sake 7896.
Streptomyces fradiae, butirosin A acetylation 5164.
Trichophyton rubrum, undecanoic acid drug resistance, triacylglycerol lipase,
keratinase, phosholipase A, levels 7877.

Resistomycin,

Streptomyces griseoflavus, structure, biosynthesis 8887.

Resorcinol,

biodegradation, Aspergillus niger 3774.

Respiration,

anilazine, effects on, Escherichia coli 5168.
bacteria, soil microorganisms, soils (loam), sterilization, storage, effects on
6977.
bacteria, soil, Pahokee muck, species diversity, community structure, population
density, ecological distribution 5912.
biological oxygen demand, sewage effluents, pollution monitoring, algae 2614.
fungi, fermentation heat, carbon sources 145.
measurements, aerobic bacteria, activated sludge 6254.
Mycobacterium smegmatis, rifampicin effects on 7156.
nodules, nitrogen fixation, water stress effects on, Glycine max 1499.
Pseudomonas solanacearum, Penicillium, tannins soil amendment effects on 593.
radioactive labelling, biodegradation, microorganisms 3509.
Saccharomyces uvarum, measuring techniques, use, tetrazolium salts 9088.
seasonal variations, soil properties, grasslands, tropical environment 561.
seedlings, roots, Phytophthora cinnamomi infection, plants 5668.
soil microorganisms, biomass, petroleum sand 5916.
soil microorganisms, decomposition, straw, C/N ratios 6966.
soil microorganisms, herbicides effects on 5975.
soil microorganisms, measuring techniques 8666.
soil microorganisms, measuring techniques, microcosms 571.
soil microorganisms, N-phosphorylase, glycose effects on 620.
soil microorganisms, Parastacoides tasmanicus burrows effects on, peatlands 7803.
soil microorganisms, pesticides, herbicides, effects on 5908.
soil microorganisms, redox potential, flooded soils 6957.
soil microorganisms, seasonal variations, crop fields, soils (organic) 3191.
soil microorganisms, seasonal variations, deserts 6964.
soil microorganisms, temperature effects on 3206.
soil microorganisms, 2-methyl-4-chlorophenoxybutyric acid, disulfotol, effect on
5974.
soil properties, diurnal variations, tropical environment, forests, pasture 1493.

Respirators,

medical equipment, nosocomial environments, bacteria contamination 9823.

gram-negative bacteria endotoxins effects on, cotton contamination, man 1320.

Respiratory syncytial virus,

amidines, derivatives, antiviral activity 4316.
antibodies, detection, hemadsorption 1742.
defective-interfering particles, quantitation, colorimetry, bioassays 7230.
detection, immunoperoxidase test, comparison, immunofluorescence, diagnosis 9862.
indirect fluorescent antibody test, monoclonal antibodies 9855.
infection, immunofluorescence diagnosis, nasopharynx secretion, man 9832.
infection, indirect fluorescent antibody test, diagnosis, man 823.
isolation, clinical microbiology, HEP-2 cells 9009.

Respiratory tract,

isolates, Aspergillus flavus, airborne microorganisms, man, hospitals,
relationship, buildings construction 3493.
isolation, Haemophilus influenzae, media (selective) 9952.

Respiratory tract diseases,

cattle, animal isolates, Pasteurella, drug resistance, antibiotic resistance
7884.

Respiratory tract infection,

bekanamycin treatment, man, antibacterial activity 6186.

Restrictocin,

N-terminus amino acid sequence, homology α -sarcin, mitogillin, Aspergillus
114.

Retinal-binding protein,

purification, characterization, bacteriorhodopsin deficient mutant, purple
membranes, Halobacterium halobium 4561.

Retrostatin,

antiviral activity, avian myeloblastosis virus DNA polymerase (RNA-dependent)
inhibition 9734.

Retrovirus,

chelating agents, disassembly 699.

Revegetation,

land reclamation, mines, soil amendment, mycorrhizas, Pinus taeda 2302.
land reclamation, mines, soil amendment, vesicular-arbuscular mycorrhizas
colonization roots, Agropyron trachycaulum 9542.
mines, mycorrhizas inoculation, Coniferaleis 519.
waste disposal, oil, biodegradation, soil properties 7020.

Reverse osmosis,

membranes, cellulose acetate, biodegradation, bacteria, fungi 2883.

Revertants,

Penicillium chrysogenum, penicillin production 6154.

Reviews,

acalcanomycin A, characterization 769.
aflatoxins, contamination, milk, milk products, toxicity, cattle 283.
aflatoxins, toxicity, mechanisms, plants 5647.
Aganous bisporus cultivation, composts 9281.
Agaricus bisporus cultivation, lignocellulose degradation, nutritive value 7596.
anaerobic bacteria, antibiotic sensitivity testing 2519.
anaerobic bacteria, drug sensitivity testing, antibiotic sensitivity testing
6113.
animals, aflatoxicosis, interaction, metals, dietary intake 4900.
antibiotic resistance, cefotaxime, β -lactam antibiotics 5987.
antibiotics biosynthesis, characterization, N.M.R., methodology 7988.
antibiotics, production, Streptomyces 4332.
antibiotics standardization 2501.
antibiotics, structure, mass spectroscopy 8825.
antimicrobial agents activity, organic matter effects on 6081.
antimicrobial agents, topical application 6080.
antiviral activity, amantadine, 5-trifluorothymidine, 5-iodo-2'-deoxyuridine,
adenine arabinoside 6063.
antiviral activity, interferon 4311.
antiviral agents, antiviral activity, influenza virus 5215.
Ascochyta rabiei blight, Cicer arietum 1142.
Aspergillus, yeasts, citric acid production 5470.
azlocillin, antibacterial activity 3848.
bacteria aerosols, characterization, factors affecting viability 8115.
bacteria, drug resistance, cotrimoxazole, trimethoprim 3293.
bacteria, fungi, immobilized cells, transformation, steroids 3706.
bacteria hydrogenase activity, immobilization, applications 9169.
bacteria, menaquinone biosynthesis, precursors, enzymes, genetic control 6628.
bacteria, plant diseases, vectors, insects 2963.
bacteria, polysaccharides, applications, industries 9200.
bacteria, resistance, antimicrobial agents, metals, ions, association, plasmids
8735.
beer, fermentation, yeasts 3746.
bioassays, water quality 2602.
biodegradation, industrial wastes, soaps, detergents 5579.
biomass production, sedimentation, fermenters 8083.
bioreactors, aeration, Hansenula polymorpha, Escherichia coli, media (culture)
8064.
Bordetella pertussis, toxins 7630.
catechol oxidase structure, spectroscopy, mechanisms, Neurospora crassa 6549.
cefotaxime, antibacterial activity 6116.
cellulolytic microorganisms, enzymes hydrolysis lignocellulose 7540.
cephalosporins, antibacterial activity 674.
cephalosporins, antibacterial activity 6131.
cephalosporins, antibacterial activity, side effects, cost-benefit analysis 7143.
chemostats, continuous culture, microorganisms, growth rate 7211.
cinroxacin treatment, gram-negative bacteria urinary tract infection, man,
antibacterial activity, reviews 8762.
Clostridium tetani toxins, structure 2078.
composting, industrial wastes, land disposal 6242.
composting mechanisms, microorganisms role 6249.
Corynebacterium diptheriae toxins, structure, toxicity 6724.
cotrimoxazole, antibacterial activity 4288.
cotrimoxazole, antibacterial activity, bacteria 6032.
crop residues fermentation, gases environments, Aspergillus oryzae, Trichoderma
reesei, Streptomyces 4723.
dentification, enzymes role, pathway 5118.
dentifying bacteria, dentification, evolution 5111.
dentifying bacteria, niches, competition, dentification mathematical models
5110.
digestion (anaerobic), waste water, solid wastes, technology 9801.
drinking water, water analysis 2628.
Endothia parasitica, disease control, virulence, blight, Castanea dentata 4165.
enterotoxins, Staphylococcus aureus 6723.
environmental effects, immobilized cells 1737.
ergot 5560.
Escherichia coli, enterotoxins, food poisoning, man 1104.
ethanol production, Zymomonas mobilis 7507.
explosives, industrial wastes, biodegradation 5578.
factors affecting fermentation 1986.
food poisoning ergot Claviceps purpurea, man 1074.
food-and-mouth disease vaccines, production, genetic engineering 8921.
fungi identification, pathogens, immunoassays 8165.
fungi, leaf litter, soil, nutrient cycles, ecosystem analysis 5889.
fungi, diseases, epidemiology, roots growth 3903.
fungi, transformation, use, organic compounds production 5441.
fungi, use, antibiotics production 5238.
fungi, use, production, food, fuels, chemicals 5443.
fungi viruses, role, plant diseases 1119.
 β -D-galactanase, purification, characterization 1877.
heat treatments, effects on, bacteria, beef, food quality 8488.
helper viruses, plant diseases 2979.
herpes simplex virus clinical isolates, drug resistance 9653.
herpes simplex virus, 9-(2-hydroxyethoxymethyl)guanine drug resistance 9652.
herpesvirus, 9-(2-hydroxyethoxymethyl)guanine antiviral activity, mechanisms
9656.
hydrolyases purification, use affinity chromatography 1898.
immobilized enzymes, recommendations 8311.
immunoassays, bacteriology, antibiotics use 1604.
industrial effluents, food industry, treatment, methodology 792.
industrial wastes, digestion (anaerobic), methanogenesis, microorganisms 7196.
inorganic pyrophosphatase kinetics, bacteria 6465.
interspecific relationships, soil flora, fungi, forest floor, Oribatidae 5069.
isolation methodology, potato leaf roll virus 8100.
 β -lactam antibiotics, aminoglycoside antibiotics, synergism, therapeutic

Reviews, (continued)

- applications, antibacterial activity 6091.
lactic acid bacteria, carbohydrates metabolism 9125.
lactoferrin, transferrin, conalbumin antibacterial activity, relationship microflora immune response, Mammalia 5176.
man, antiviral agents, mechanisms, treatment, viruses infection 3364.
man, children, dentifrices, toothbrushing, effects on, dental plaque, formation 9824.
man, skin infection prophylaxis, use, chlorhexidine soaps 6276.
man, topical application antimicrobial agents, skin disinfection 6278.
man, use, soaps+antimicrobial agents 6277.
meat, *Salmonella* control, radiation treatment 8481.
media (culture), gases solubility, microorganisms 8082.
mezlocillin, antibacterial activity mechanisms, pharmacokinetics 6151.
microbiology patents, technology 6358.
microorganisms biosynthesis, extracellular polymers 1951.
microorganisms, detergents effects on enzymes metabolism 6399.
microorganisms, genetic engineering, fermentation, reviews 6585.
microorganisms, immobilized cells, production, hydrogen 6607.
microorganisms strains combination cultivation, enzymes, antibiotics, biosynthesis improvements 6548.
microorganisms, use, hydroxylation, steroids 7218.
milk, role, disease transmission 211.
mushrooms cultivation, cultivation techniques 5614.
mushrooms cultivation, technology, species use, USA 4825.
mycoplasma, plant diseases, electron microscopy 9316.
mycorrhizas, role, trees cultivation F1P5 3227.
mycotoxins, cereals, food contamination 1099.
nitrite, control, *Clostridium botulinum*, cured products 4821.
nitrogen fixation, nitrogen-fixing bacteria, soil, forests ecosystems 9511.
nosocomial infection, man, association medical equipment 2639.
Oryza sativa, sheath blight, *Rhizoctonia solani* 6766.
oxodirectedness, enzymes, use, biotechnology 9145.
Paracoccus denitrificans, denitrification energetics 5117.
pathogens inactivation, occupational exposure risks, land disposal, industrial wastes 5978.
penicillin-binding protein, function, structure, role, β -lactam antibiotics resistance, bacteria 6397.
penicillins, antibacterial activity 6150.
Pennisclerospora, *Sclerospora graminicola*, downy mildew, Zea mays, Sorghum vulgare, *Penicillium typhodeum*, epidemiology 1186.
phages isolation methodology, water 2649.
Phytolacca americana proteins antiviral activity, relationship disease resistance 9478.
plant breeding, disease resistance, plant diseases 2971.
plant diseases 7647.
plant diseases, biological control, phylloplane 3147.
plant diseases, disease resistance, defense mechanisms 1336.
plant diseases, epidemiology, relationship planting density 2972.
plant diseases, etiology, genetic analysis 2970.
plant viruses, Australia 8528.
plants, phytotoxins, disease resistance, India 1369.
polythiazole containing peptide antibiotics, characterization 1682.
potato spindle tuber viroid structure, physicochemical properties, role, plant diseases 8529.
Pseudomonas, denitrification, genetic analysis 5119.
psychotropic bacteria, food contamination, milk, dairy products 226.
Rhizoctonia solani mating types, taxonomy, pathogenicity, plant diseases 2974.
Saccharomyces cerevisiae, oxygenase, biodegradation, transformation, aromatic compounds 3667.
Salmonella typhimurium, gene mapping, genetic analysis, methodology 9052.
serum bactericidal activity, gram-negative bacteria 4295.
soil microorganisms, decomposition, crop residues, food processing solid wastes, land disposal 5981.
soil microorganisms decomposition, industrial wastes, pharmaceuticals, land disposal 5984.
soil microorganisms decomposition, organic compounds, toxicants, land disposal 5977.
soil microorganisms, decomposition, solid wastes, land disposal 5976.
soil, production, antibiotics, Streptomyces 4403.
soil-borne diseases, agricultural practices 7648.
sorbitates, meat products preservation 4873.
steroids conversion, immobilized cells, immobilized enzymes 3707.
Streptococcus pneumoniae vaccines, composition, use, man 8049.
streptognin, characterization 8896.
streptothricin characterization 9782.
substrates utilization, fungi, bacteria 6655.
sulfonamides, inhibition, carbonate dehydratase, bacteria 8756.
vesicular-arbuscular mycorrhizas, plants symbiosis, use, agricultural practices 5988.
viruses, chemicals, induction, disease resistance, plants 7751.
viruses, plant diseases, disease spread, agricultural practices 2978.
waste treatment, composting, association, physicochemical properties 7191.
white rot, *Sclerotium cepivorum*, pathology, disease control, *Allium cepa* 1260.
wood preservatives, land disposal, soil microorganisms biodegradation 5985.
yeasts fermentation, ethanol production, models 7522.
yeasts, glucans, cell walls 1953.
- Rhabdites**, phosphorus mineralization, oil shales, *Pseudomonas* 556.
Rhabdoline, needle cast, *Pseudotsuga menziesii* 536.
Rhabdoline pseudotsugae, needlecast, chemical control, *Pseudotsuga menziesii* 2312.
Rhabdoline pseudotsugae subsp. pseudotsugae, needlecast, plantations, *Pseudotsuga menziesii* 5864.
Rhabdoline weirli subsp. oblonga, needlecast, plantations, *Pseudotsuga menziesii* 5864.
Rhabdovirus, antiviral agents effects on replication 6068.
infection, association, mycoplasma-like organisms witches' broom incidence, *Cajanus cajan*, USA, Florida 4945.
infection, cytology, *Lactuca sativa* 1234.
infection, Gramineae 2118.
- Rhamnose**, N.M.R., *Streptococcus* group A 7436.
Rhannus cathartica, *Puccinia coronata* pathogenicity, relationship, sexual reproduction, asexual reproduction 9338.
Rheology, mixing, liquid culture, *Absidia corymbifera* mycelia, morphology 9069.
Penicillium chrysogenum, liquid culture 9070.
Penicillium funiculosum, cellulose biodegradation 166.
Rheum raphaniticum, turnip mosaic virus, arabis mosaic virus, effects on, yield 2198.
Rhinovirus, disease transmission, household products, surfaces, man 804.
replication inhibition, dichloroflavan 6070.
Rhipsalidoploea gaertneri, stem rot, *Drechslera cacticola* 1261.
Rhizidiomycopsis, parasitism, *Gigaspora margarita*, *Glomus fasciculatus*, fungicides, effects on 5200.
Rhizobacterium, inoculation, effects on, *Erwinia carotovora*, infectivity, *Solanum tuberosum* 3061.
Rhizobiales, host range, plasmids, association, host plants cell recognition 5937.
nitrogen fixation, conferences 6361.
Rhizobium, agricultural practices, research programs, symbiosis, Leguminosae, Latin America antibiotic resistance 2410.
aromatic compound biodegradation 3784.
association, *Pseudomonas*, inoculum, Zea mays, roots, methodology 3548.
 \pm *Azospirillum brasilense*, association, *Cicer arietinum*, nitrogen fixation 5963.
bacteroids structure, nitrogen fixation, enzymes, nodules, *Medicago sativa* 9613.
bacteroids viability, *Pisum sativum*, *Lupinus*, *Trifolium*, *Clianthus puniceus* 7860.
capsules, extracellular, polysaccharides structure 7437.
cross-infectivity, Leguminosae 5965.
effects on pathogenesis, peanut mottle virus infection, *Arachis hypogaea* 5687.
enumeration, counting methods, soil 610.
 \pm fertilizers slurries, inoculation, seedlings, coal mines 8691.
1,2- β -D-glucans, structure 6582.
glycine, nodulation, nitrogen fixation, seeds yield, tillage effects on 5130.
growth, nitrogen fixation, soil, salinity, effects on 597.
growth rate, competition, nodulation, temperature effects on, *Vigna unguiculata* 9588.
growth, rhizosphere microorganisms inhibition 1488.
host range specificity, association *Trifolium repens* nitrogen fixation 602.
hydrogen production, nutrient dynamics, carbon, nitrogen, *Vigna unguiculata* 4247.
hydrogenase activity, nodules, Leguminosae 7837.
identification, *Arachis hypogaea*, use, enzyme-linked immunosorbent assay 8306.
indole-3-acetic acid, role nodulation, root hairs, Leguminosae 1509.
infection, *Galega*, DNA homology, phage typing, nodulation, taxonomic significance 8696.
infection, Leguminosae, effects on *Gramineae* 2113.
infection, *Trifolium repens*, *Medicago sativa*, *Cicer arietinum*, effects on, nodulation, yield 2226.
inoculation, effects on fertilizers mung bean mild mosaic virus, pathogenicity, *Phaseolus aureus* 8534.
inoculation, Leguminosae seeds, problems, Israel 5945.
inoculation, nitrogen fixation yield, *Calopogonium caeruleum* 9617.
inoculation, nodulation, nitrogen fixation, *Vicia angustifolia*, inoculation 6992.
inoculum analysis, leguminosae field trials 5132.
interspecific relationships, mutualism, mycorrhizas, Leguminosae 9555.
intraspecific relationships, association, *Glycine* max nodulation 9605.
isolates characterization, *Cajanus cajan*, *Cicer arietinum* 7821.
isolation, characterization, Leguminosae, Australia 6990.
isolation, screening, nodulation, *Macrotyloma uniflorum* 2360.
Leguminosae nodulation, nitrogen fixation, herbicides application effects on 5981.
Rhizobium, *Leucaena leucocarpa*, inoculation *Desmanthus virgatus*, tests, dilution frequency 1505.
mutants, *Cicer arietinum*, nodulation, nitrogenase activity, competition 7854.
nitrate reductase, measuring techniques 1507.
nitrogen fixation, acetylene reduction, diurnal variations, *Trifolium repens* 609.
nitrogen fixation, *Aeschynomene indica*, growth conditions 3244.
nitrogen fixation analysis, leguminosae, isotopes methodology 5131.
nitrogen fixation, books 9996.
nitrogen fixation, genetic analysis, crops 9604.
nitrogen fixation, *Glycine* max, nitrogen fertilizers effects on 5105.
nitrogen fixation, growth, Leguminosae, solar radiation effects on 5115.
nitrogen fixation, Leguminosae growth, solar radiation effects on 5115.
nitrogen fixation measurement, *Glycine* max 5129.
nitrogen fixation, *Phaseolus vulgaris*, planting density effects on 6983.
nitrogen fixation, seasonal variations, cultivars effects on, *Glycine* max 9581.
nitrogen fixation, symbiosis, *Hedysarum coronarium*, Israel 5947.
nitrogen fixation, *Trifolium subterraneum*, *Medicago truncatula* 2366.
nitrogen fixation, utilization carbon sources, photosynthesis, energy budget, *Glycine* max 9603.
nitrogen fixation, *Vigna*, roots, shoots, genotypes 3234.
nitrogenase activity, relationship extracellular polymers, nodules, *Vigna radiata*, *Cicer arietinum* 8678.
nodulation, *Aeschynomene* stems, characterization 7836.
nodulation, *Arachis hypogaea*, genetic analysis 7015.
nodulation, *Cajanus cajan*, yield, growth 9606.
nodulation, *Cicer arietinum*, growth, nitrogen fixation 6989.
nodulation, *Glycine* max, *Glycine soja*, *Vigna unguiculata* 3230.
nodulation, leguminosae roots ethylene biosynthesis, sulfur fertilizers effects on 1503.
nodulation, *Medicago sativa*, association, *Fusarium oxysporum* infection 5114.
nodulation, nitrogen fixation, *Parosporia rigida*, oxygen uptake 3243.
nodulation, nitrogen fixation, utilization, carbon sources, photosynthesis, *Vicia faba*, relationship mycorrhizas 615.
nodulation, soil amendment effects on, yield, *Glycine* max 9582.
nodulation, *Vigna sinensis*, phoric acid effects on 4251.
nodules, *Vicia faba*, nitrogen fixation 3231.
phytotoxins, allelopathy, *Polygonum aviculare* 8683.
polysaccharides structure 4704.

Rhizobium, (continued)

- rhizosphere microorganisms, nodulation, *Leucaena leucocephala* 5959.
role Leguminosae nitrogen fixation 690.
seeds inoculation, nodulation, nitrogen fixation, *Arachis hypogaea* 9591.
Sesbania rostrata mature, effects on nitrogen fixation, *Oryza sativa* 4240
soils inoculation, Medicago sativa, *Lotus corniculatus* nodulation 5128.
solar eclipse effects on nitrogen cycle 2370.
strains, cross inoculation, *Vigna sinensis* cultivars 5123.
strains identification, antibiotics use 887.
strains identification, antibiotics use 890.
strains, inoculation, nitrogen fixation, host range, *Glycine max*, *Vigna mungo*,
 Vigna unguiculata 8679.
survivability, inoculation, *Vigna radiata* seeds 1498.
survival + Leguminosae seeds, inoculum methodology effects on 1510.
symbiosis, *Cicer arietinum*, effects on nodules 3965.
symbiosis, *Lens culinaris*, salinity tolerance effects on 5955.
vesicular-arbuscular mycorrhizas, phosphate levels, soil, yield, Medicago sativa
 7850.
viability, association, storage, role, temperature, media 7242.
viability, Leguminosae, inoculum equipment effects on 5954.
Vigna mungo, hydrogen uptake relationship nitrogen fixation 7002.
- Rhizobium japonicum**,
aldehyde dehydrogenase, purification, activity 22.
antagonists, soil microorganisms 576.
antibacterial activity, pesticides 9670.
antibiotic resistance isolates, *Glycine max* nodules 651.
characterization, sodium chloride tolerance, *Glycine max* nodulation 6976.
R factors, antibiotic resistance, kanamycin, tetracycline 7875.
fast-growing, nitrogen fixation, nodulation, *Glycine soja* 4249.
Glycine max, effects on yield, Canada 7861.
Glycine max nodules, enzymes effects on nitrogen fixation 8694.
Glycine max nodules, hydrogen uptake effects on nitrogen fixation 7009.
Glycine max nodules, nitrification, nitrate effects on 8693.
hydrogenase activity, screening 3578.
infection, *Glycine max*, roots nodules ultrastructure 3928.
ineffectivity, *Glycine max*, cell culture age effects on 2112.
koihexase biosynthesis, new records 7435.
Leguminosae, survival, association, sewage sludge soil amendment 7832.
mutants, nitrogen fixation, photosynthesis, yield, *Glycine max* 9579.
mutants, triphophan catabolism, biosynthesis, indole-3-acetic acid, indolepyruvic
 acid 8198.
nitrogen fixation, *Cajanus cajan* nodules hydrogen release 7858.
nitrogen fixation, carbon dioxide enrichment effects on, *Glycine max* 4248.
nitrogen fixation, effects on *Glycine max* yield 7000.
nitrogen fixation, *Glycine max*, association ureides 2365.
nitrogen fixation, irrigation, soil moisture, yield, *Glycine max* 6993.
nitrogen fixation, Leguminosae, hydrogen production, recycling 5936.
nitrogen fixation, nodulation, methan fumigation inhibition, *Glycine max* 3251.
nitrogenase activity, roots exudates, *Glycine max*, *Vigna unguiculata* 3225.
nitrogenase, *Glycine max* nodules, nitrite, nitric oxide, effects on 1501.
nodulation, effects on pathogenicity, *Phytophthora megasperma* f.sp.glycinea, root
 rot, *Glycine max* 5669.
nodulation, *Glycine max*, nitrogen fixation assays, methodology 8690.
nodulation, *Glycine max*, nitrogen fixation efficiency 7833.
nodulation, host range, cultivars, *Glycine max* 7841.
nodulation, induction chlorosis, *Arachis hypogaea* 7828.
nodulation, role capsules polysaccharides, *Glycine max* 3237.
nodulation, yield, *Glycine max* 9580.
nodules, *Glycine max*, hydrogen metabolism 6979.
nodules, *Glycine max*, nitrogenase activity, protein biosynthesis 7010.
plants nodules, nitrogen fixation 1511.
survival liquid culture, use seeds inoculation, Leguminosae 1786.
survival, soil moisture effects on 2342.
survival, soil properties 557.
symbiosis, genetic analysis, *Heterodera glycines*, *Glycine max* 6998.
symbiosis, *Glycine max*, host specificity 2369.
symbiosis *Glycine max*, nodulation, photosynthesis, nitrogen cycle 8701.
symbiosis, *Glycine max*, roots temperature effects on 6940.
symbiosis, *Glycine max*, salinity effects on nitrogen fixation 7830.
symbiosis, *Vigna unguiculata*, *Macropitium atropurpureum*, *Glycine max*,
 characterization 8700.
- Rhizobium leguminosarum**,
antibiotic resistance 2410.
competitiveness, nodulation, *Lens esculenta* 3235.
cytokinins levels, nodules, *Pisum sativum* 5120.
incompatibility, *Pisum sativum* ecotypes 5940.
interaction, *Vicia faba* lectins, 2,4-D, 2,4,5-T, effects on agglutination 8692.
nitrogen fixation, acetylene reduction relationship hydrogen gas production,
 Pisum sativum 9585.
nitrogen fixation, nodulation, relationship, plasmid p11008 transfer 595.
nitrogen fixation, *Strophostyles helvolia* defoliation effects on 5127.
nodulation, nitrogen fixation, association, *Pisum sativum* nodules 5951.
symbiosis, *Pisum sativum*, hydrogen recycling effects on nitrogen fixation 3229.
symbiosis, *Pisum sativum*, nitrogen fixation 7852.
Vicia faba yield, effects on 6982.
- Rhizobium lupini**,
amino acids biosynthesis, association, tricarboxylic acid cycle metabolites,
 sucrose 8199.
bacteroids, lipopolysaccharides, lipid composition, carbohydrate composition
 9188.
cell walls, proteins, carbohydrates, chemical extraction, methodology 2700.
growth, soil microorganisms inhibition, in vitro 6963.
polysaccharides structure 4704.
- Rhizobium melliloti**,
antibiotic resistance 2410.
extraacellular β -1,2-D-glucan isolation, characterization 6576.
 β -D-glucan, extracellular polymers, polysaccharides, characterization 9193.
growth, soil microorganisms inhibition, in vitro 6963.
infection, *Trifolium repens*, Medicago sativa, *Cicer arietinum*, effects on,
 nodulation, yield 2226.
inoculation, adhesives, seed treatments, Medicago sativa 8681.
inoculation effects on nutrient uptake, soils (saline), Medicago sativa 7842.
isolation, characterization, Leguminosae, Australia 6990.
nitrogen fixation, Medicago 2377.
nitrogen fixation, nitrogen levels, genotypes, Medicago sativa 605.
nitrogen fixation, photosynthesis carbon sources effects on, Medicago sativa

Rhizobium melliloti, (continued)

9578.
nitrogenase, genes, transcription, nodulation, Medicago sativa 3228.
nodulation, Medicago sativa, vesicular-arbuscular mycorrhizas role growth.
 nutrient uptake, phosphorus fertilizers effects on 6943.
nodulation, nitrogen fixation, light intensity, carbon dioxide concentration,
 effects on, Medicago sativa 9586.
nodules development, nitrate effects on, Medicago sativa 3239.
pH, effects on, nodulation, Medicago sativa 3238.
polysaccharides, carbohydrate composition 6574.
polysaccharides, radioassays 3589.
soils inoculation, Medicago sativa, *Lotus corniculatus* nodulation 5128.
strains, competition, association, nodulation, Medicago sativa 7857.
symbiosis, Medicago sativa, acetylene reduction 2374.
transposon 5, mutants, Medicago sativa, nodules, ultrastructure 7848.
- Rhizobium phaseoli**,
+ Glomus fasciculatum, symbiosis, nitrogen fixation, phosphorus uptake, Phaseolus
 vulgaris 1502.
glutamine synthetase, isoenzymes, purification, characterization 6467.
glutamine synthetase, nitrogenase, nitrogen fixation, nodules, Phaseolus vulgaris
 6985.
nitrogen fixation, inoculation, Phaseolus vulgaris, land reclamation, mines 5108.
nodulation, Leguminosae, strains competition 4245.
nodulation, Phaseolus vulgaris, Pseudomonas syringae subsp.phaseolicola halo
 blight effects on 7652.
nodulation specificity, Phaseolus coccineus, Phaseolus vulgaris 598.
polysaccharides structure 4704.
survival liquid culture, use seeds inoculation, Leguminosae 1786.
survival, Phaseolus vulgaris seeds, coal inoculum effects on 3159.
survival, soils (acidic) 3197.
- Rhizobium trifolii**,
ammonium nitrate tolerance, effects on nodulation 7855.
antibiotic resistance 2410.
antibiotics biosynthesis, antimicrobial activity 3379.
attachment roots nitrate inhibition, trifolium repens 4242.
bacteroids, scanning electron microscopy, nodules, *Trifolium repens* 8676.
capsules, binding lectins, roots exudates, *Trifolium repens* 1508.
colonization roots, *Trifolium alpinum*, fluorescent antibody test 6991.
competition, nodulation, *Trifolium subterraneum* 5116.
competitiveness, *Trifolium repens* soil microorganisms, factors affecting 611.
experimental infection, *Trifolium incarnatum*, nitrogen fixation, lines variation
 430.
growth, soil microorganisms inhibition, in vitro 6963.
infection, *Trifolium repens*, Medicago sativa, *Cicer arietinum*, effects on,
 nodulation, yield 2226.
inoculation, *Trifolium*, association soil improvement, British Isles 6953.
inoculation, *Trifolium* survival improvements 5953.
isolation, characterization, Leguminosae, Australia 6990.
mutants, soil, nitrogen fixation, viability 2354.
nitrogen fixation, *Trifolium incarnatum*, heritability 7829.
nodulation, *Trifolium repens*, hydrogen, gas production 3245.
periplasmic space, β -D glucosidase, β -D-galactosidase, purification,
 characterization 5499.
polysaccharides structure 4704.
strains, inoculation, nodulation, *Trifolium repens* 608.
strains, nodulation, *Trifolium incarnatum* genotypes, relationship, nitrogen
 fixation 7847.
symbiosis, *Trifolium repens*, nitrogen fixation 7003.
symbiosis, *Trifolium repens*, soil pH, acidity, effects on, measuring techniques
 4235.
- Rhizoctonia**,
benzimidazole derivatives, plants disease control 490.
blight, *Lepesedza cuneata*, disease resistance, plant breeding 8666.
blight, *Lepesedza cuneata*, pathogenicity, seeds yield association 6745.
damping-off, bedding plants, isolates characterization 2194.
infection, disease control, association, fungicides seed treatments, *Arachis*
 hypogaea 2291.
post-harvest decay, pathogenicity, symptoms, *Rumohra adiantiformis* 1326.
root rot, susceptibility, *Gossypium hirsutum*, relationship, radicle exudates,
 + chilling 4030.
root rot, *Trifolium repens*, etiology 8537.
- Rhizoctonia aderholdii**,
infection, *Beta vulgaris*, phytoalexins formation 2260.
- Rhizoctonia bataticola**,
benzimidazole derivatives, plants disease control 490.
damping-off, root rot, disease resistance, seedlings exudates, *Cicer arietinum*
 7755.
infection, *Coniandrum sativum*, new records, India 3978.
+ Meloidogyne incognita, mixed infection, plants, effects on growth 4992.
root rot, *Cicer arietinum*, biological control, *Streptomyces*, *Stachybotrys atra*
 1148.
root rot, *Cicer arietinum*, factors affecting, rhizoplane microorganisms,
 rhizosphere microorganisms 7651.
- Rhizoctonia cerealis**,
eye spot, etiology, *Triticum aestivum* 2124.
foot rot, antifungal activity, peracetic acid, Gramineae 1394.
Gramineae footrot pathogens antagonism, *Pseudocercospora herpotrichoides*,
 Fusarium 1148.
ineffectivity, *Triticum*, *Solanum tuberosum* 9367.
- Rhizoctonia goodyerae-repentis**,
symbiosis, *Goodyera repens*, roots, mycorrhizas 4201.
- Rhizoctonia leguminicola**,
1,2,8-trihydroxy-octahydroindolizine, characterization 7500.
- Rhizoctonia solani**,
anastomosis, identification, media (selective) 9989.
antibiotics, effects on, growth 3335.
antifungal activity, dithiocarbamates 3153.
antifungal activity, essential oils, *Chenopodium ambrosioides* 7933.
antifungal activity, extracts 1570.
antifungal activity, pyrazoles derivatives 6875.
benzimidazole derivatives, plants disease control 490.
bulbs, Tulipa, Iris, storage conditions effects on survival 3973.
crown rot, root rot, pathogenicity, Medicago sativa, Egypt 5675.
damping-off, bedding plants, isolates characterization 2194.
damping-off, biological control, in vitro, *Trichoderma harzianum* 2854.
damping-off, herbicides effects on, *Vigna unguiculata* 9482.

Rhizoctonia solani, (continued)

damping-off, integrated control, herbicides, nematocides, crop rotation, soil fumigation, *Cucumis sativus* 9473.
 disease control, insecticides, *Glycine* max 8625.
 growth, hyphae extension, valdamycin inhibition 1568.
 infection, *Avena*, Gaumannomyces graminis suppression, soil, effects on 3205.
 infection, *Gossypium*, carboxin, antifungal activity 4122.
 infection, *Gramineae*, Gaumannomyces graminis suppression, soil, effects on 3207.
 infection, *Helianthus annuus* seedlings, disease control, fungicides 6870.
 infection, *Oryza sativa* seedlings, soil moisture effects on 4965.
 infection, *Salvinia molesta*, pathology 3096.
 infection, *Solanum tuberosum*, antagonism 9429.
 infection, *Solanum tuberosum*, factors affecting disease spread 6789.
 infection, vegetables, plants, disease control 2267.
 infection, *Vigna radiata*, biodegradation, seed-borne diseases 3915.
 infectivity, *Triticum*, *Solanum tuberosum* 8367.
 isolates, blight, pathogenicity, *Phaseolus vulgaris* 1134.
 isolation, plants, seasonal variations, soil 2097.
 isolation, use, media (culture)+valdamycin 2709.
 pathogenicity, *Carica papaya* 1218.
 pathogenicity, soil-borne diseases, *Euphorbia lathyris* 5002.
 penetration, *Hordeum vulgare*, roots, coleoptile 2132.
 phospholipid, biodegradation 5586.
 plant diseases, roots, *Zea mays*, interaction, herbicides 5706.
 proteinase production 3670.
 quitozine resistance, growth rate 4268.
 root rot, *Beta vulgaris*, disease control, sulfur 3157.
 root rot, cultivation techniques, *Beta vulgaris* 1279.
 root rot, growth conditions, *Phyllanthus emblica*, *Quercus serrata*, *Citrus* 6915.
 root rot, *Phaseolus vulgaris*, incidence, *USA*, Wisconsin, bioassays 3923.
 sheath blight, histopathology, *Oryza sativa* 372.
 sheath blight, *Oryza sativa*, height effects on yield 3017.
 sheath blight, *Oryza sativa*, overwintering disease control, burning 4953.
 sheath blight, *Oryza sativa*, reviews 6766.
 sheath blight, virulence, *Solanum tuberosum*, *Oryza sativa* 1193.
 soil population levels, anastomosis, association, *Arachis hypogaea*, *USA*, Texas, *USA*, New Mexico 5094.
 soil-borne diseases control, antifungal agents *USA*, association, manure applications 323.
 soil-borne diseases, integrated control, *Trichoderma harzianum* bulbs treatment, *USA*, disease 7768.
 source, dispersal, soil, greenhouses 3898.
 stem canker, black scurf, disease control, iprodione, benodanil, thiabendazole, *Solanum tuberosum* 5055.
 stem rot, interaction root rot, *Fusarium solani* f.sp. *Pythium ultimum*, *Aphanomyces euteiches*, *Plum sativum* 9328.
 taxonomy, mating types, pathogenicity, plant diseases, reviews 2974.
Trichoderma harzianum, parasitism, detection, photography, methodology 8159.
 web blight, benomyl disease control, *Glycine* max 5059.
 web blight, mulches disease control, *Phaseolus vulgaris* 5050.
 wilt, rhizosphere microorganisms, *Solanum tuberosum*, insecticides effects on 1512.

Rhizoctonia zeae,

pathogenicity, *Gramineae* 5701.
 plant diseases, roots, *Zea mays*, interaction, herbicides 5706.

Rhizomes,

overwintering, mycoplasma-like organisms, *Rubus idaeus*, *Cirsium arvense* 6816.
Zostera marina, nitrogen fixation 8698.

Rhizomorpha,

Artemisia melaleuca, formation, tannic acid stimulation, role pathogenicity, trees 1455.

Rhizospheres,

Phytophthora megasperma f.sp. *medicaginis*, dimensions, measurements methodology 9571.

Rhizoplane,

Azotobacter chroococcum growth, *Zea mays*, *Gossypium hirsutum*, *Triticum aestivum* 5911.

Hordeum, nitrogen fixation, relationship, *Spirillum lipoferum* 4241.

Rhizoplane microorganisms,

Cicer arietinum, root rot, *Rhizoctonia bataticola*, factors affecting 7651.
 content, zinc, lead, soil, USSR 2334.
 incidence, *Gramineae* mixtures 569.
Saccharum officinale, Streptomycetes, soil, characterization 6978.

Rhizoplane rhizoids,

growth, cadmium, lead, nickel, effects on 3189.

Rhizopogon,

host specificity, fungi mycorrhizas 5901.
Pinus radiata, *Pseudotsuga menziesii*, New Zealand 7774.

Rhizopus,

distillation, feeds, radiation disinfection 7605.
 exo-1,4- α -D-glucosidase, ethanol fermentation methodology, sweet potatoes 5569.

exo-1,4- α -D-glucosidase fragments, purification, characterization 1909.

exo-1,4- α -D-glucosidase, glucose, gluconolactone binding 6484.

exo-1,4- α -D-glucosidase, immobilization, use, *Sepharose-6MB* 9147.

exo-1,4- α -D-glucosidase, N-terminus, C-terminus, amino acid sequence 7315.
 infection, disease control, association, fungicides seed treatments, *Arachis hypogaea* 2291.

post-harvest decay, cantaloupes, control, use, benomyl+guazatine 6835.

spoilage, effects on fatty acids, peanuts 4053.

Rhizopus arrhizus,

post-harvest decay, etiology, *Manihot esculenta* 3102.

post-harvest decay, prunes 5901.

stem rot, pathology, *Nicotiana glauca* 5762.

uranium adsorption, chitin effects on 8714.

use, hydroxylation, steroids, reviews 7218.

verrucaric acid, verrucarin B, transformation, 16-hydroxyverrucarin A,

16-hydroxyverrucarin B 7503.

Rhizopus chinensis,

pepsin biosynthesis, liquid culture 100.

proteinase pepsatin complex, X-ray diffraction 1904.

purification, characterization, proteinase 41.

Rhizopus delemar,

biotin biosynthesis, optimization 6626.

biotin production 1972.

Rhizopus nigricans,

cell walls, glucuronans, physicochemical properties 6578.

microsomes, cytochrome P-450, NADPH-cytochrome reductase, fractionation 6466.
 post-harvest decay, tomatoes, γ radiation+heat treatments+chemicals control 2237.

Rhizopus niveus,

exo-1,4- α -D-glucosidase, purification, characterization 6456.

Rhizopus oryzae,

chemicals, antifungal activity 3336.

fungistasis, transferin 8792.

post-harvest decay, disease control, fungicides, cantaloupes 1399.

Rhizopus pygmaeus,

purification, characterization, proteolytic enzymes 5520.

Rhizopus stolonifer,

fruit rot, disease control, fungicides, *Ficus carica* 1396.

immobilized cells, progesterone hydroxylation 4541.

infection, effects on, *Lycopersicon esculentum*, mutants, cellulase, pectinolytic enzymes 5773.

infection, *Lycopersicon esculentum* fruits, pathogenesis 8590.

post-harvest decay, prunes 5801.

prunes spoilage 4777.

Rhizophthora,

decomposition, leaf litter, *Abies alba* 2301.

Rhizosphere,

Alnus, Actinomycetes isolation, antibiotic sensitivity testing 664.

Azospirillum brasilense, Azotobacter chroococcum, nitrogen fixation, yield, *Zea mays*, *Sorghum bicolor* 1500.

Azospirillum brasilense inoculation, nitrogen fixation, yield, *Triticum aestivum* 9602.

Azospirillum, nitrogen fixation, *Ipomoea batatas* 9594.

Azotobacter, Azomonas agilis, crops 9583.

Azotobacter paspali, nitrogen fixation, nitrogen-15, measuring techniques, *Paspalum notatum* 9609.

Bacillus polymyxa, *Azospirillum brasilense*, nitrogen fixation, nitrogen-15

dilution, *Triticum aestivum* 9587.

bacteria biomass, agricultural practices, meadows 9534.

Cucumis sativus, disease spread, *Pseudomonas syringae* pv. *lachrymans* 4997.

fungal flora, surveys, *Saccharum officinarum* 7813.

Hordeum, nitrogen fixation, relationship, *Spirillum lipoferum* 4241.

Juniperus procera, nitrification inhibition, forests 3223.

Nematoda, vesicular-arbuscular mycorrhizas inhibition, plants 5095.

nitrogen fixation, genetic analysis, *Oryza sativa* 8682.

nitrogen fixation, measuring techniques, nitrogen-15 9608.

nitrogen fixation, nitrogen-fixing bacteria, conferences 10008.

nitrogen-fixing bacteria, counting methods, identification, taxonomy 9593.

nitrogen-fixing bacteria, crops 9592.

nitrogen-fixing bacteria, *Gramineae* 9600.

nitrogen-fixing bacteria, nitrogen fixation, genetic analysis, crops 9604.

nitrogen-fixing bacteria, nitrogen fixation, orchards, *Artocarpus heterophyllus*, *Areca* 9595.

nitrogen-fixing bacteria, nitrogen fixation, *Sorghum bicolor*, *Pennisetum americanum* 9612.

Oryza sativa, nitrogen-fixing bacteria, growth, enumeration, isolation, spermophytes use 3616.

phosphate-dissolving bacteria, *Gramineae*, *Leguminosae* 2333.

phosphate-dissolving bacteria, growth, inhibition, 2,4-D,

2,4-dichlorophenoxy-1,2-nitrophenyl ether,

5-methyl(2,4-dichlorophenoxy)-2-nitrobenzoate, *Triticum aestivum* 4252.

Pseudomonas, nitrogen fixation, *Deschampsia caespitosa* 9597.

Pseudomonas, nitrogen fixation, *Oryza sativa* 9596.

sediments, nitrogen fixation, sulfate-reducing bacteria, *Zostera marina* 2356.

soil properties, fungistasis, *Caenarius cajan*, *Lathyrus sativa* 558.

trees, endomycorrhizas spores abundance, land reclamation, mines 9541.

Rhizosphere bacteria,

effects on growth, yield, *Solanum tuberosum* 6937.

Rhizosphere microorganisms,

aspartate aminotransferase, alanine aminotransferase, activity, factors affecting 5911.

Cicer arietinum, root rot, *Rhizoctonia bataticola*, factors affecting 7651.

content, zinc, lead, soil, USSR 2334.

Diplachne fusca, soil isolates nitrogen fixation 592.

fungicides foliar applications effects on, *Cicer arietinum* 4254.

inhibition, growth, *Rhizobium* 1486.

inhibition pathogens, root rot, plants 1118.

metabolism, roots exudates, crop fields 5888.

metabolism, soil, association *Manihot utilisima* 5918.

Nicotiana rustica age effects on 7795.

nitrogen fixation, *Triticum aestivum* roots exudates effects on 4237.

nitrogen-fixing bacteria, role, nitrogen nutrition, *Triticum aestivum* 7006.

nutrient sources, nitrogen, phosphorus, plant communities, nival zone 4213.

Oryza sativa, parathion biodegradation 2897.

+phytochemicals+pesticides, etiology, decline, *Zea mays* 367.

phytochemicals orchards roots growth, *Malus pumila*, *Malus* 4141.

population density, prometryne, trifluralin, roots exudates effects on, *Gossypium hirsutum* 8706.

relationship, roots exudates, counting methods, equipment 5755.

respiration, *urea folia* application effects on, *Triticum aestivum* 7820.

Rhizobium, nodulation, *Leucaena leucocephala* 5959.

soil fertility effects on 7798.

Solanum tuberosum, insecticides effects on 1512.

Triticum soil properties effects on 7797.

tropical environment plants, *Azospirillum*, identification, incidence 7853.

urea foliar applications effects on, *Zea mays* 5932.

Zea mays, effects on minerals uptake 4190.

Rhizosphora,

dieback+caner, *Gambia* 1454.

Rhodococcus,

antibacterial activity, β -lactam antibiotics 2503.

biodegradation, aniline 7556.

identification, use, immunodiffusion 2664.

Nocardia, identification, use, bleomycin sensitivity 671.

Rhodococcus erythropolis,

aniline utilization 3786.

conversion, (12Z)-labda-8(17),12,14-trien-18-ol,

4,18,19-trien-3,4-seco-5-oxo-(12Z)-labda-8(17),12,14-trien-3-olc acid 8438.

scleareol, abienol, conversion, plasmids association 8437.

- Rhodococcus erythropolis**, (continued)
 α , α -trehalase-2,3,4,2-tetraesters production 4709.
- Rhodococcus rhodochrous**,
 propane assimilation 628
- Rhododendron**,
 dieback, Phytophthora disease control, greenhouses 9419.
 dieback, Phytophthora parasitica, overwintering, temperature, effects on 9389.
 dieback, Phytophthora parasitica, sporangia, survival, pathology 9386.
 incidence, mycorrhizas, greenhouses, USA, Rhode Island 4202.
 Phytophthora cinnamomi infectivity, soil pH effects on 3994.
 Phytophthora infection, incidence, greenhouses 1282.
- Rhododendron obtusum**,
 leaves, bioassays, Phytophthora cinnamomi, soil 324.
- Rhododendron ponticum**,
 endomycorrhizas symbiosis development, structure 3199.
- Rhodocrobium vannielii**,
 nitrogen fixation inhibition, nitrite association 5124.
 nitrogenase biosynthesis, relationship.
- Rhodopseudomonas**,
 5-aminolevulinic acid biosynthesis mechanisms 8209.
 hydrogen production 125.
- Rhodopseudomonas capsulata**,
 chromophores, cytochrome c, purification, characterization 4637.
 chromatophores, ATP measurement, reactors 4482.
 ferredoxin multiple forms, isolation, physicochemical properties 7299.
 ferredoxin, purification, characterization 1833.
 glutamine synthetase, nitrogenase iron protein, radioactive labelling 3693.
 hydrogen production, carbon sources, lactic acid, acetic acid, butyric acid 7469.
 hydrogen production substrates, lactic acid, acetic acid, butyric acid 8386.
 membranes, cytochrome c oxidase purification, characterization 6504.
 nitrogenase activity, genetic control 19.
- Rhodopseudomonas gelatinosa**,
 cytochrome c551 multiple forms, heme iron coordination geometry, N.M.R. 3653.
- Rhodopseudomonas palustris**,
 acyl-CoA synthetase coenzymes 6519.
 adenosinetriphosphatase, adenylate kinase, purification, characterization 9170.
 fructose-bisphosphatase, purification, characterization 6409.
 nitrogen fixation inhibition, nitrite association 5124.
 nitrogenase biosynthesis, relationship, culture concentration Rhodopseudomonas capsulata 3687.
- Rhodopseudomonas sphaeroides**,
 adenosinetriphosphatase, adenylate kinase, purification, characterization 9170.
 ADP-glucose synthetase, purification, characterization 93.
 batch culture, hydrogen production 1980.
 coproporphyrinogen oxidase, mechanisms 4615.
 lipid-harvesting proteins, solubilization, detergents extraction methodology 9028.
 lipopolysaccharides, lipid A, characterization 8332.
 tartrate dehydrogenase+D-malate dehydrogenase (decarboxylating) bifunctional enzymes, purification, characterization 7415.
 D(-)-tartrate hydro-lyase production 2796.
 ubiquinol-cytochrome c reductase, cytochrome b, isolation, characterization 4564.
 ubiquinol-cytochrome c reductase, cytochrome b, physicochemical properties 4692.
 uroporphyrinogens biosynthesis, enzymes systems 9206.
- Rhodopseudomonas sphaeroides f.sp. denitrificans**,
 denitrification effects on nitrogen fixation 5125.
- Rhodopseudomonas viridis**,
 thylakoids, reaction centers, cytochrome c2, purification 6392.
- Rhodospirillum rubrum**,
 carotenoproteins, spirilloxanthin configurations, Raman spectroscopy 6625.
 chromatophores, ATP regeneration 3733.
 coupling factor 1, inactivation, histidine residues diethyl pyrocarbonate chemical modification 8285.
 cytochrome c', subunit association, N.M.R., ultracentrifugation, light scattering 7296.
 glucose-1-phosphate adenyltransferase, purification, characterization 26.
 illumination, hydrogen production, nitrogen sources analysis 8366.
 nitrogenase biosynthesis, relationship, culture concentration Rhodopseudomonas capsulata 3687.
 nitrogenase, subunits composition, activation, inactivation effects on 76.
 ribulosebisphosphate carboxylase, assays, stoichiometry 1889.
 ribulosebisphosphate carboxylase, cations binding 1882.
 ribulosebisphosphate carboxylase mechanisms, intermediates radioactive labelling 83.
 ribulosebisphosphate carboxylase mechanisms, intermediates radioactive labelling 85.
 ribulosebisphosphate carboxylase mechanisms, intermediates radioactive labelling 87.
 ribulosebisphosphate carboxylase, purification, characterization 6424.
- Rhodospirillum rubrum**,
 enzymes, electrophoresis 7422.
- Rhodopseudomonas sphaeroides**,
 reaction centers, cytochrome c binding sites, cross-linking dithiobispropionimide, dimethyl suberimide 3651.
- Rhodotorula**,
 enzymes, electrophoresis 7422.
 ethanol production 7527.
 food contamination, fruit juices, Venezuela 7574.
- Rhodotorula glutinis**,
 nerolid biosynthesis, enzymatic activity 3723.
 L-picolate dehydrogenase, purification, characterization 34.
- Rhodotorula gracilis**,
 lipid biosynthesis, carbon sources, nitrogen sources effects on 7464.
- Rhodotorula mucilaginosa**,
 immobilized cells, benzaldehyde conversion, benzyl alcohol production 8440.
- Rhopalosiphum maidis**,
 vectors, maize chlorotic dwarf virus, maize dwarf mosaic virus, pesticide applications, soil, carboturan 7738.
 vectors maize dwarf mosaic virus, disease control, oil, Zea mays 6843.
- Rhopalosiphum padi**,
 barley yellow dwarf virus, infection, Hordeum vulgare, Avena sativa, effects on, disease transmission 8553.
 disease transmission, barley yellow dwarf virus, USA, Missouri 1164.
- Rhus vernicifera**,
 laccase reconstitution, copper thionein complex, Saccharomyces cerevisiae 6497.
- Rhynchosporium**,
 infection, Lolium perenne, Lolium multiflorum, incidence, British Isles 5721.
 leaf blight, Lolium, pathology 6768.
- Rhynchosporium oryzae**,
 phytotoxins, phytotoxicity, pathogenicity, scald, Oryza sativa 9348.
- Rhynchosporium secalis**,
 infection, Hordeum, herbicides effects on spores quantity 486.
 leaf blight, disease control, fungicides, plant breeding, crop rotation, Hordeum vulgare 5809.
 leaf blight, Hordeum, disease control, antifungal agents treatment timing 488.
 leaf blight, Hordeum vulgare 5728.
 leaf blight, Hordeum vulgare 5730.
 pathogens, disease resistance, association, Hordeum spontaneum fertility 6759.
 scald, disease resistance, Hordeum vulgare, genetic analysis 451.
 scald, phytotoxins binding membrane proteins, receptors, Hordeum vulgare 9346.
- Ribavirin**,
 antiviral activity 7948.
 antiviral activity, influenza A virus 3359.
 antiviral activity, influenza A virus 3361.
 disease control, potato virus X, Nicotiana tabacum 2271.
 drug resistance, fowl plague virus mutants 630.
 effects on rhabdovirus replication 6068.
 grapevine leaf roll virus infection, Vitis vinifera, effects on pathogenesis 5066.
 injection, disease control, apple mosaic virus, Malus pumila 9500.
 treatment, potato virus X, potato virus S, infection, Solanum tuberosum 8581.
 treatment, viruses infection, plants 3121.
 use, potato virus X eradication, Solanum tuberosum cultivars 1239.
- Ribes**,
 infection, vein banding virus 2180.
- Ribes nigrum**,
 leaves, sakuranetin, antifungal activity, Botrytis cinerea 1332.
 powdery mildew, Sphaerotheca mors-uvae, disease resistance 7748.
 × Ribes rubrum, plant breeding, disease resistance, Sphaerotheca 1345.
 sakuranetin, defense secretions, antifungal activity, Botrytis cinerea 1379.
- Ribes rubrum**,
 × Ribes nigrum, plant breeding, disease resistance, Sphaerotheca 1345.
- Ribgrass mosaic virus**,
 host-pathogen interactions 2094.
 infection, Plantago 2174.
- Ribicitrin**,
 structure, dextranucrase inhibitors, Streptococcus mutans 3686.
- Riboflavin**,
 effects on citric acid production, Aspergillus niger 5468.
 ± hydrogen peroxide, inactivation, alfalfa M1, milk 285.
 + magnesium chloride, → aromatic compounds, media (culture), photoactivation, bactericidal activity, Salmonella typhimurium 8781.
- Riboflavin 5'-phosphate**,
 mobility, flavodoxin, N.M.R., Megaspheera elsdeni 7302.
- 1- β -D-Ribofuranosyl-5-phenylcytosines**,
 antiviral activity 7944.
- 1- β -D-Ribofuranosyl-5-(2-chlorophenyl)-2-thiocytosine**,
 antiviral activity 7944.
- 9- β -D-Ribofuranosylpurine-6-carboxamide**,
 analogs, production, antiviral activity 5212.
- 2- β -D-Ribofuranosylselenazole-4-carboxamide**,
 antiviral activity 8797.
- Ribonuclease**,
 Aspergillus niger, purification, characterization 1854.
 Bacillus intermedius, conformational analysis, tryptophan residues 2768.
 Bacillus, purification, characterization 1937.
 immobilized enzymes, yeasts 1907.
 induction, Nicotiana tabacum tissues, tobacco necrosis virus infection 318.
 inhibition, tobacco mosaic virus replication, Nicotiana tabacum 6885.
 kinetics, comparison immobilized enzymes, use oligonucleotides synthesis, Bacillus intermedius 8284.
 leaves, inhibition tobacco mosaic virus, potato virus X, multiplication, plants 2095.
 pancreas, Bacillus intermedius, Streptomyces rimosus, antiviral activity, pseudorabies virus, foot-and-mouth disease virus 6077.
 Saccharomyces cerevisiae, heat shock induction 4689.
 Streptomyces rimosus, antiviral activity, foot-and-mouth disease virus, Ayezeke virus 2492.
 Vigna sinensis, Cucumis sativus, tobacco necrosis virus infection, osmotic stress effects on 413.
- Ribose**,
 incorporation, Veillonella parvula, association, lipopolysaccharides biosynthesis 8333.
- Ribose isomerase**,
 purification, characterization, Mycobacterium smegmatis 4652.
- Ribose-binding protein**,
 purification, characterization, Escherichia coli 6375.
- Ribosomal protein L29**,
 tertiary structure, hydrodynamics, C.D., N.M.R., Escherichia coli 1838.
- Ribosomal protein L30**,
 tertiary structure, hydrodynamics, C.D., N.M.R., Escherichia coli 1838.
- Ribosomal protein S1**,
 amino acid sequence statistical analysis, Escherichia coli 4567.
- Ribosomal protein S14**,
 amino acid sequence, secondary structure predictions, Escherichia coli 4566.
- Ribosomal proteins**,
 biosynthesis regulation, Neurospora crassa 4562.
 Escherichia coli, ribosomal subunit 30S, fractionation, high-performance liquid chromatography 1775.
 Podospira asnera, association emetine resistance 3274.
 C.D., N.M.R., ribosomal subunit 50S, Escherichia coli 7298.
- Ribosomal subunit 30S**,
 Escherichia coli, ribosomal proteins, fractionation, high-performance liquid chromatography 1775.
- Ribosomal subunit 50S**,
 crystal structure, electron microscopy, Bacillus stearothermophilus 4563.
 ribosomal protein, C.D., N.M.R., Escherichia coli 7298.
 tyrosine residues, iodination, Escherichia coli 7289.
- Ribosomes**,
 Escherichia coli, alkyl dimethylbenzyl ammonium chloride effects on 5184.
 Escherichia coli, dissociation, aminoacyl-tRNA hydrolase, erythromycin,

Ribosomes, (continued)

- carbonyl, spiramycin, effects on 1630.
- membranes, *Bacillus licheniformis*, biosynthesis, α -amylase, α -D-glucosidase 8295.
- protein biosynthesis, methanogenic bacteria, antibiotic sensitivity testing 2423.
- protein composition, *Mycoplasma capricolum* 929.
- relationship, RNA polymerase, biosynthesis, *Bacillus subtilis* 1940.
- trypsin residues, iodination, *Escherichia coli* 7289.

Ribostamycin,

- derivatives, synthesis, antibacterial activity 8853.
- Streptomyces ribosidificus*, biosynthesis, transamination role, neosamine C formation 8909.

Ribulosebiphosphate carboxylase,

- Chromatium viriosum, purification methodology 5409.
- mechanisms, intermediates radioactive labelling, *Rhodospirillum rubrum* 83.
- mechanisms, intermediates radioactive labelling, *Rhodospirillum rubrum* 85.
- mechanisms, intermediates radioactive labelling, *Rhodospirillum rubrum* 87.
- purification, characterization, *Rhodospirillum rubrum* 6424.
- Rhodospirillum rubrum*, assays, stoichiometry 1889.
- Rhodospirillum rubrum*, cations binding 1882.
- use, media (isolation), proteolytic bacteria, rumen microorganisms, cattle 7243.

Rice,

- Aspergillus flavus*, *Aspergillus parasiticus*, sporulation, aflatoxin B1, formation 2446.
- black tip, association, *Alternaria*, *Curvularia*, toxicity 3863.
- canning, food processing, food contamination 256.
- composition, microorganisms food contamination effects on 7588.

Rice dwarf virus,

- disease resistance, rice stripe virus, genetic relationship, *Oryza sativa* 6773.

Rice gall dwarf virus,

- disease transmission, Nephotettix vectors, *Oryza sativa* 4987.
- disease transmission, *Recilia dorsalis*, *Nephotettix nigropictus*, *Oryza sativa* 1162.

Rice necrotic mosaic virus,

- infection, *Ludwigia perennis*, effects on growth 5777.

Rice stripe virus,

- disease resistance, rice dwarf virus, genetic relationship, *Oryza sativa* 6773.

Rice tungro virus,

- infection, *Oryza sativa*, susceptibility, incidence 1156.

Rice tungro virus,

- disease transmission, Nephotettix vectors, *Oryza sativa* 360.
- disease transmission, vectors, chemical control, plant extracts, *Nephotettix virescens* 7737.
- host range, *Nephotettix virescens*, *Nephotettix nigropictus* vectors, *Oryza* 4951.
- infection, induction proline, leaves, *Oryza sativa* 1157.
- infection, *Oryza sativa*, insecticides, disease control, vectors 8613.
- transmission, *Nephotettix*, *Oryza sativa* 6761.
- vectors, *Nephotettix virescens*, disease control, insecticides 6847.

Rice walka virus,

- transmission, *Nephotettix*, *Oryza sativa* 6761.

Rice yellow mottle virus,

- host range, Gramineae 8555.
- infection, *Oryza glaberrima*, disease resistance genes identification 4968.
- Oryza sativa*, Nigeria 7672.

Ricinun communis,

- toxins, interferon conjugation, antiviral activity 3348.

Rickettsia,

- antibacterial activity, tetracycline, rifampicin 1640.

Rickettsia prowazekii,

- antibacterial activity, antibiotic synergism, tetracycline, penicillin, rifampicin, chick embryos 7969.
- antibacterial activity, tetracycline, rifampicin 1640.

Rickettsia rickettsii,

- doxycycline sensitivity 1638.

Rickettsia sibirica,

- antibacterial activity, antibiotic synergism, tetracycline, penicillin, rifampicin, chick embryos 7969.
- antibacterial activity, tetracycline, rifampicin 1640.

Rickettsia-like organisms,

- isolation, phony disease, *Prunus persica*, culture, pathogenicity 6787.
- plant diseases, vectors, insects 1120.
- rosette, vectors, *Plesma quadratum*, *Beta vulgaris* 6810.

Rifampicin,

- Actinomyces* antibiotic sensitivity testing 6109.
- antibacterial activity, *Legionella pneumophila* 9738.
- antibacterial activity, *Mycobacterium leprae* 3419.
- antibacterial activity, radioactive labelling, *Mycobacterium leprae*, infected macrophages 9658.
- antibacterial activity, *Rickettsia* 1640.
- antibacterial activity, *Staphylococcus aureus* 3383.
- antibacterial activity, *Staphylococcus*, clinical isolates 8804.
- antibiotic antagonism, penicillins, *Listeria monocytogenes* 5247.
- antibiotic resistance, *Escherichia coli*, urinary tract clinical isolates 7034.
- antibiotic resistance, *Vibrio cholerae*, β -D-galactosidase, catalase, alkaline phosphatase activity 6018.
- antibiotic sensitivity testing methodology comparison 6090.
- antibiotic synergism, antibacterial activity, *Mycobacterium intracellulare* 3309.
- antibiotic synergism, tetracycline, penicillin, *Rickettsia prowazekii*, *Rickettsia sibirica*, chick embryos 7969.
- antifungal activity, *Dematiaceae* 7929.
- antimycobacterial activity, *Mycobacterium* 2419.
- bactericidal activity, *Staphylococcus aureus*, phagocytosis, phagolysosomes, pH intracellular levels 9733.
- Campylobacter fetus* subsp. *jejuni* drug sensitivity testing 4292.
- \pm dimethyl sulfoxide, antimycobacterial activity, *Mycobacterium avium-intracellulare* 2401.
- drug resistance, *Mycobacterium tuberculosis*, clinical isolates, Korea Rep. 9656.
- drug sensitivity testing, *Mycobacterium intracellulare*, infection, monkeys, clinical aspects 4285.
- effects on *Escherichia coli* transcription 1627.
- effects on gene expression, *Escherichia coli* *lacZ* gene, fusion, promoters, terminators 1626.
- effects on *Mycobacterium smegmatis* respiration, growth, RNA biosynthesis 7156.
- effects on physiology, *Bacillus megaterium*, *Candida utilis* 8859.
- mixtures, separation techniques 1629.
- \pm oxacillin, bactericidal activity, *Staphylococcus aureus* 5263.

Rifampicin, (continued)

- +teichomycin, +vancomycin, antibacterial activity, *Staphylococcus*, *Streptococcus* 3392.
- trimethoprim, synergism, in vitro, antibacterial activity, bacteria drug resistance 6163.
- \pm vancomycin, \pm gentamicin, antibiotic synergism, antibacterial activity, methicillin resistance *Staphylococcus* 7126.
- +vancomycin, antibacterial activity, *Enterobacteriaceae* 772.
- Yersinia pestis* antibiotic sensitivity testing 6110.

Rifamycin,

- antibiotic resistance, *Bacillus subtilis*, mutants, sporulation 7901.

Rifamycin B,

- derivatives, antibacterial activity 8858.

Rifamycin B oxalide,

- derivatives, synthesis, structure 8861.

Rifamycin B,

- Nocardia mediterranei*, biosynthesis, pH effects on 6165.

Rifamycin B oxalide,

- solutions stability, physicochemical properties 8860.

Rifamycin B oxalide,

- purification, substrate specificity, *Monocillium* 2766.

Rifamycin,

- biosynthesis, *Nocardia mediterranei* recombinants 6164.

- derivatives, biosynthesis, *Nocardia mediterranei*, association 4-substituted 3-amino-5-hydroxybenzoic acid 1628.

Rift Valley fever virus,

- enzyme-linked immunosorbent assay 9854.

Rigidiporus lignosus,

- rot, *Hevea brasiliensis*, pathogenesis 5081.

Rigidiporus lignosus,

- infection, *Hevea brasiliensis* roots, pathogenesis 5879.

Rinderpest virus,

- antigens, detection, fluorescent antibody test, methodology, diagnosis, cattle 830.

Rinderpest virus,

- antigens detection, immunoprecipitation 2658.

Ring rot,

- +potato virus S, potato virus X, infection, effects on, *Solanum tuberosum* yield 1230.

Ringspot,

- Agave reprints*, association, tobacco streak virus, broad bean wilt virus, cucumber mosaic virus, alfalfa mosaic virus 3043.

Ripening,

- cheddar cheese, contamination, aflatoxin M1 levels 281.
- cheddar cheese, sodium chloride + potassium chloride, *Staphylococcus aureus*, growth, enterotoxins biosynthesis 2037.
- cheese, amino acids levels, bacteria 5603.
- cheese, contamination, aflatoxin M1 levels 282.
- cheese, lactic acid bacteria, soybean milk, organoleptic properties 3823.
- cheese, lactic acid bacteria, temperature effects on 8460.
- cheese, *Lactobacillus helveticus*, *Lactobacillus bulgaricus*, *Lactobacillus lactis*, effects on 200.
- cheese, *Lactobacillus* levels, cheese flavor, chemical analysis 2906.
- cheese, salt, effects on, proteolysis 221.
- defects, *Lycopodium esculentum* fruits, association tobacco mosaic virus infection, disease resistance 4094.
- effects on, aflatoxin M1 levels, contamination, cheese 280.
- Lycopodium esculentum*, 1-aminocyclopropane-1-carboxylate synthase, *Streptomyces griseolus*, sinefungin, inhibition 7593.
- salami, food contamination, bacteria 2030.

Ristocetin- α -glycone,

- antibacterial activity, gram-positive bacteria 3429.

Ristolmycin,

- actinidine, amino acid sequence 7165.
- antibacterial activity, *Staphylococcus*, clinical isolates 8804.
- biosynthesis, *Nocardia fructifer*, nitrogen sources, carbon sources, effects on 2590.
- Salmonella* clinical isolates, antibiotic sensitivity testing 6112.
- Yersinia pestis* antibiotic sensitivity testing 6110.

Ristolmycin A,

- structure 1642.

Rivers,

- Brazil, levels, coliforms, saprophytes 8066.
- British Isles, tobacco necrosis virus isolation, infection, *Chenopodium* 4020.
- contamination, *Escherichia coli*, coliforms, phages, Yugoslavia 2820.
- contamination, mines waste water, temperature effects on bacteria iron oxidation 5134.
- ecological distribution, *Pseudomonas aeruginosa*, incidence 2621.
- Egypt, drinking water contamination, bacteria 2618.
- Egypt, drinking water contamination, parasites 2619.
- Escherichia coli*, antibiotic resistance, R factors incidence 7204.
- microbial pollution, *Escherichia coli*, coliforms, hydrology 1724.
- sediments isolates, bacteria, PCB biodegradation 8421.
- sewage, treatment, effects on, microbial pollution, bacteria 6264.
- Vibrio metschnikovi* water isolates, phenotypes 6267.
- water pollution, *Leptospira icterohemorrhagiae*, epidemiology, infection, man 6266.

RNA,

- association thymidylate synthase, *Streptococcus faecium* 4598.
- avocado sunblotch disease viroid, detection, *Persea americana* infected leaves 3028.
- cucumber mosaic virus, deflection, *Nicotiana glauca* extracts 5783.
- double-stranded, extraction methodology, rotavirus 6232.
- double-stranded, isolation, viruses infected plants, methodology 3897.
- double-stranded, isolation, viruses infection, plants 2981.
- double-stranded, regulation interferon, antiviral activity, vesicular stomatitis virus, encephalomyocarditis virus, L cells 7105.
- fluorescent probes, biotin labelling, use phase T4 polynucleotide synthetase (ATP) 9833.
- isolation, ion-exchange chromatography, yeasts 5480.
- luciferin transfer streak virus, induction, lesions, *Chenopodium amaranticolor* 5779.
- plant viruses, isolation, analysis, methodology, relationship plant diseases diagnosis 9866.
- potato spindle tuber viroid, double-stranded, infected *Lycopodium esculentum* leaves 3044.
- separation techniques, yeasts nucleoproteins 9119.
- 5'-terminus, plant viruses, hybridization analysis methodology 9867.

RNA, (continued)

- tobacco mosaic virus, yeasts, degradation, ozone 1592
transcription, polyoma virus infected cells, actinomycin D resistance 3306.
virods, stunt, *Arctium tomentosum*, *Arctium lappa*, etiology 4021
viruses, hybridization analysis, plant cells, detection, plant cells 6299.
white leaf disease, cucumber mosaic virus, relationship, infectivity,
Lycopersicon esculentum 2195.
- RNA biosynthesis,**
S-adenosylhomocysteine, analogs, effects on, vacuina virus 3349.
encapsalation of tobacco etch virus, infected scirpus tumor cells,
N-phenyl-N'-3-hydroxyphenylthiourea effects on 9683
Escherichia coli, aminoglycoside antibiotics effects on 6094.
Escherichia coli, *Bacillus subtilis*, parabens, effects on 7120.
Escherichia coli, diauxic growth 8215.
inhibition, *Pseudomonas* pisi hypersensitive response, *Nicotiana tabacum* 5787.
Klebsiella pneumoniae, *Penicillium laeta*, marasme acid, effects on 6083.
3'-O-methyl adenosine, 3'-O-methyl guanosine, inhibition, vacuina virus 3360.
Mycobacterium smegmatis, rifampicin effects on 7156.
Streptococcus mutans, DNA biosynthesis, antibacterial activity, cefotaxim,
mecillinam 7135.
sulfochloranthine effects on, *Escherichia coli* 2456.
2-thiouracil, effects on, tobacco mosaic virus 5220.
- RNA phages,**
coliforms, typing, sewage sludge, Africa 6269.
- RNA polymerase,**
genes, *Escherichia coli*, rifampicin effects on transcription 1627.
mutants, structure-activity relationship, *Escherichia coli* 6611.
purification, characterization, *Halobacterium halobium* 7334.
relationship, ribosomes: biosynthesis, *Bacillus subtilis* 1940.
- RNA polymerase I,**
activity, phosphorylation regulation, *Saccharomyces cerevisiae* 4599.
- RNA polymerase II,**
activity, phosphorylation regulation, *Saccharomyces cerevisiae* 4599.
- RNA polymerase (RNA-dependent),**
activity, *Datura stramonium*, potato virus X infection 9374.
- mRNA,**
isolation methodology, *Physarum polycephalum* lysates 7268.
methylation, S-adenosylhomocysteine, analogs, effects on, vacuina virus 3349.
SV40 transformed cells, isolation, membrane filtration 829.
- mRNA (guanine-7'-methyltransferase),**
purification, characterization, *Saccharomyces cerevisiae* 8272.
- mRNA guanlyltransferase,**
purification, characterization, *Saccharomyces cerevisiae* 6510.
- rRNA 21S,**
genes, yeasts mitochondria, erythromycin resistance 1526.
- rRNA,**
labelling, phase T4, polyribonucleotide synthetase(ATP) use 9860.
- rRNA (guanine-7'-methyltransferase),**
purification, characterization, *Salmonella typhimurium* 6509.
- Roots,**
excess pollution effects, enzymatic activity, soil microorganisms 7801.
- Roccal-D,**
antibacterial activity, *Salmonella cholerae-suis*, *Staphylococcus aureus*,
Pseudomonas aeruginosa 7918.
- Roots,**
habitat, microorganisms, ecophysiology, Antarctica 9548.
uranium mobilization, mycelia growth, *Aspergillus*, *penicillium* 7014.
- Rodentia,**
feeding damage, *Cronartium*, blister rust, *Pinus* 2318.
- Rodogly,**
antibacterial activity, oral cavity isolates 8864.
- Role,**
interaction DNA, role antifungal activity, mutagenesis 4309.
- Rondomycin,**
antibiotic resistance, *Escherichia coli*, urinary tract clinical isolates 7034.
- Root hairs,**
Leguminosae, nodulation, role indole-3-acetic acid, *Rhizobium* 1509.
- Root rot,**
Abies alba, *Phytophthora*, pathology, incidence 4150.
Aphanomyces eutiches f.sp.pisi, pathogenesis, *Pisum sativum* 9319.
Aspergillus flavus, herbicides, disease control, *Arachis hypogaea* 2277.
Beta vulgaris, disease control, *sulfur* 3157.
Carica papaya, *Phytophthora palmivora*, disease control 1213.
Cicer arietinum, *Rhizoctonia bataticola*, biological control, *Streptomyces*,
Stachybotrys atra 7455.
cottony leaf blight, *Prunus persica* 2151.
Cytocye tabescens, fumigants disease control, *Malus pumila* 492.
Cylindrocyclodium crotalariae, pathology, *Glycine* max, *Meloidogyne incognita*,
growth regulators, effects on 3909.
disease resistance, genetic analysis, *Carica papaya* 1343.
Erwinia, disease resistance, plant breeding, Beta 1376.
fungi, infection, *Trifolium*, effects on yield 2104.
fungi, *Triticum aestivum* yield, factors affecting 1179.
fungicides disease control, *Lycopersicon esculentum*, *Solanum melongena* 6872.
Fusarium graminearum, nitrapyrin disease control, *Triticum aestivum* seedlings
4109.
Fusarium, *Leguminosae* 5681.
Fusarium moniliforme, pathology, *Sorghum bicolor* 8560.
Fusarium oxysporum, ectomycorrhizas, *Laccaria laccata*, protection, *Pseudotsuga*
menziesii 3173.
Fusarium oxysporum f.sp.radicis-lycopersici, epidemiology, *Lycopersicon*
esculentum 3998.
Fusarium solani, *Cyamopelte tetragonoloba* 5676.
Fusarium solani f.sp.pisi, *Pythium ultimum*, *Aphanomyces eutiches*, interaction
stem rot, *Rhizoctonia solani*, *Pisum sativum* 9328.
Glycine max, disease control, fungicides seed treatments, USA, Ohio 7772.
Glycine max, *Phytophthora megasperma* f.sp.glycinea, treatment,
metalaxyl+phytoalexins 503.
Gramineae 4959.
Heterobasidion annosum, disease resistance, surveys, *Picea abies*, Norway 6918.
Heterobasidion annosum, *Verticillidella*, susceptibility, *Scolytidae* pest attack,
Pinus ponderosa 5865.
Hordeum vulgare, planting density effects on, *Cochliobolus sativum* 7674.
Lycopersicon esculentum, *calypella campanula*, new records 4026.
Macadamia integrifolia, *Kretzschmaria clavus* infection, perithecia relationship
5731.

Root rot, (continued)

- Medicago sativa, *Phytophthora megasperma* f.sp.medicaginis, USA, Wyoming 3921.
Medicago sativa, *Pseudomonas viridiflava* 6744.
mortality, *Pseudotsuga*, *Abies*, *Pinus*, forests 5075.
Myrothecium roridum, *Myrothecium verrucaria*, *Medicago sativa*, *Trifolium temense*,
root rot 9329.
pathogens, inhibition, rhizosphere microorganisms, plants 1118.
Phaeosulphus vulgaris, incidence, USA, Wisconsin, bioassays 3923.
Phellinus weirii, disease spread, *Pseudotsuga menziesii* 5922.
Phellinus weirii, *Pseudotsuga menziesii* 5858.
Phymatolochium omnivorum, *Phytophthora cryptogaea*, *Cichorium intybus* 5006.
Phytophthora cinnamomi, calcium nitrate, ammonium sulfate, effects on, *Persea*
indica 2147.
Phytophthora cinnamomi, metalaxyl disease control, *Abies fraseri* 5867.
Phytophthora cinnamomi, *Scadopytes verticillata* 5749.
Phytophthora cinnamomi, seedlings, trees 1463.
Phytophthora cinnamomi, soil temperature, inoculum, effects on, *Abies fraseri*
5872.
Phytophthora, disease control, trees, silviculture 2317.
Phytophthora, disease tolerance, *Glycine* max, plant breeding, USA, Ohio 7556.
Phytophthora megasperma f.sp.glycinea, *Glycine* max 1135.
Phytophthora megasperma f.sp.glycinea, metalaxyl, *Glycine* max 1420.
Phytophthora megasperma f.sp.glycinea, races, *Glycine* max 5674.
Phytophthora megasperma f.sp.glycinea, *Rhizobium japonicum* nodulation effects on
pathogenicity, *Glycine* max 5669.
Phytophthora megasperma f.sp.medicaginis, ecological distribution, disease
resistance, *Medicago sativa* 3913.
Phytophthora nicotianae var.parasitica, fungicides disease control, seedlings,
Citrus lemon 484.
Phytophthora parasitica, disease control, metalaxyl, aluminum tris (-O-ethyl)
phosphonate, *Citrus paradisi* 5065.
Phytophthora, *Vaccinium corymbosum*, new records, USA, Arkansas 1263.
Pseudotsuga menziesii, *Fusarium oxysporum*, suppression, ectomycorrhizas 4144.
Pythium ultimum, dinitoseb, treatment, *Phaeosulphus vulgaris* 1387.
Rhizoctonia bataticola, *Cicer arietinum*, factors affecting, rhizoplane
microorganisms, rhizosphere microorganisms 7651.
Rhizoctonia bataticola, disease resistance, seedlings exudates, *Cicer arietinum*
7755.
Rhizoctonia solani, cultivation techniques, *Beta vulgaris* 1279.
Rhizoctonia solani, *Fusarium*, pathogenicity, *Medicago sativa*, Egypt 5675.
Rhizoctonia solani, growth conditions, *Phyllanthus emblica*, *Quercus serrata*,
Citrus 6915.
Rhizoctonia, susceptibility, *Gossypium hirsutum*, relationship, radicle exudates,
-chilling 4030.
Sclerotinia trifoliorum, disease resistance, *Trifolium pratense* 2251.
Thanatephos cucumeris, virulence, *Beta vulgaris* 5008.
Trematosphaeria clematis, *Medicago sativa*, USA, South Dakota 8532.
Triticum repens, etiology, *Rhizoctonia* 8537.
Triticum aestivum, fallow land effects on 379.
Triticum aestivum, fungi identification, USA, Colorado, USA, Wyoming 6776.
Verticillium dahliae, soil acidification inhibition, *Datura stramonium* 6837.
- Rooting,**
Catharanthus roseus cuttings, mycoplasma-like organisms infection 1310.
- Roots,**
Agropyron trachycalum, vesicular-arbuscular mycorrhizas colonization, soil
amendment, revegetation, land reclamation, mines 9542.
alkaline phosphatase levels, vesicular-arbuscular mycorrhizas, *Vigna unguiculata*
9560.
Arachis hypogaea, acid phosphatase, alkaline phosphatase, *Glomus fasciculatum*
6947.
association, mycorrhizas, biomass, *Vicia faba* 553.
attachment *Rhizobium trifoli*, nitrate inhibition, *Trifolium repens* 4242.
Basidiomycetes decomposition, nutrient cycles, population dynamics, *Quercus robur*
5861.
Beta vulgaris, Phoma betae infection, symptoms 3996.
Catharanthus roseus, detection, mycoplasma-like organisms 3054.
cells, *Zea mays*, urethosphonum maydis, phytoalexins, bioassays 8552.
Cocos nucifera, wilt, pathogenesis 1227.
root residues, *Fusarium culmorum* infected, role, infection, *Triticum aestivum*,
Hordeum vulgare, *Lolium perenne* 3961.
Cucumis sativus, disease spread, *Pseudomonas syringae* pv.lachrymans 4997.
cytology, mitosis, *Sorghum vulgare* seedlings, *Penicillium crinitum* phytoalexins
effects on 9344.
Daucus carota, phytoalexins, antimicrobial activity, bacteria, fungi 5057.
ectomycorrhizas infection, soil moisture effects on, *Juglans nigra* 6900.
Eucalyptus marginata, *Pinus radiata*, mantes, calcium oxalate crystals detection
association ectomycorrhizas symbiosis 4211.
exudates, crop fields, metabolism, rhizosphere microorganisms 5888.
exudates, *Glycine* max, *Vigna unguiculata*, nitrogenase activity, *Rhizobium*
japonicum 3225.
exudates, relationship, rhizosphere microorganisms, counting methods, equipment
575.
fungi infection, *Convolvulaceae*, weeds, susceptibility 9394.
Glycine max, nodules ultrastructure, *Rhizobium japonicum* infection 3928.
Glycine max, *Phytophthora megasperma* f.sp.glycinea zoospores, pathogenesis 4935.
Glycine max, temperature effects on, symbiosis, *Rhizobium japonicum* 6940.
Goydiera repens, symbiosis, *Rhizoctonia goyderae*-repentis, mycorrhizas 4201.
Gossypium hirsutum, crown gall, *Agrobacterium radiobacter* var.tumefaciens 1307.
Gossypium hirsutum, exudates, stimulation spore germination, *Fusarium oxysporum*
f.sp.vasinefectum 8706.
Gossypium hirsutum, water flow, wilt, *Phymatolochium omnivorum*, effects on 4039.
growth, *Psilothus tinctorum* effects on *Malus domestica*, association,
indole-3-acetic acid 591.
growth, plant diseases, fungi, epidemiology, reviews 3903.
growth rate, mycorrhizas, *Psilothus tinctorum*, *Eucalyptus st-honii* 6950.
Hevea brasiliensis, *Rigidoporus lignosus* infection, pathogenesis 5879.
Hordeum vulgare, *Erysiphe graminis* infection 355.
Hordeum vulgare, growth, water stress, powdery mildew, *Erysiphe graminis*
f.sp.hordei 3935.
Hordeum vulgare, *Rhizoctonia solani*, penetration 2132.
infection, ectomycorrhizas, inoculation, ultrastructure, morphology, *Erica carnea*
9504.
Ipomoea batatas, extracts, agglutination, *Ceratocystis fimbriata*, spores, host
specificity, black rot 3095.
leguminosae, ethylene biosynthesis, *Rhizobium nodulation*, sulfur fertilizers
effects on 1503.

Roots, (continued)

- Lupinus albus*, growth, microorganisms effects on 582.
 Lycopersicon esculentum, penetration, pathogenesis, association, Fusarium oxysporum, Fusarium oxysporum f.sp. pisi, Verticillium albo-atrum 5825.
 Lycopersicon esculentum seedlings, infection, verticillium albo-atrum, Fusarium oxysporum f.sp. lycopersici, pathogenesis 4028.
 morphology, vesicular-arbuscular mycorrhizas 587.
 nodules, nitrogen fixation, Myrica gale, oxygen concentration 7859.
 nutrient transport, physiology, vesicular-arbuscular mycorrhizas, host plants 1437.
 Oriza sativa, association nitrogenase activity 8695.
 Pinus, ozone effects on Fomes annosus pathogenicity 541.
 Pinus pinaster, ectomycorrhizas, Pisolithus tinctorius, chitin, biomass assays 9506.
 Pinus strobus, Pisolithus tinctorius, Hartig net, cytology 9510.
 Pinus taeda, Pinus strobus, plant diseases, association, Verticillidiella 5873.
 Pissodes approximatus, Pinus, infestation, Verticillidiella procer infection, relationship air pollution sensitivity, Pinus strobus 5866.
 plant diseases, crops, fungi, bacteria 9411.
 Poa pratensis, adhesion, Klebsiella pili, purification, characterization 8660.
 Poncirus trifoliata \times Citrus sinensis, exudates effects on spore germination, Glomus epigaeum 1477.
 pruning, Glebisia tricanthos, association Nectra cinnabarna canker 9525.
 Pseudotsuga menziesii, fung infection, incidence 4162.
 Pseudotsuga menziesii, Verticillidiella wagenen black stain 9526.
 Sorghum bicolor, fungi, colonization 5715.
 Sorghum bicolor seedlings, carbon compounds exudates, nitrogen-fixing bacteria inoculation 4243.
 Spartina alterniflora, salt marshes, localization, nitrogen-fixing bacteria 6987.
 surfaces, pendular diseases, citric acid, antibacterial activity 2457.
 symptoms, mycoplasma-like organisms yellowing, Cocos nucifera, Jamaica 2228.
 trees, stems, isolation, Cyindrodactylum, Fusarium, media (selective) 6352.
 Trifolium alpinum, colonization, Rhizobium trifolii, fluorescent antibody test 6991.
 Trifolium repens, colonization, mycorrhizas, seasonal variations 554.
 Trifolium repens, exudates, lectins, binding capsules, Rhizobium trifolii 1508.
 Trifolium repens, interaction, vesicular-arbuscular mycorrhizas 5883.
 Trifolium repens, invasion, New Zealand, fungi, Nematoda 5692.
 Trifolium repens, Pythium irregular, Phytophthora megasperma, soil microorganisms, infectivity 350.
 Trifolium subterraneum, mycorrhizas, phosphate, cations uptake 559.
 Triticum aestivum, exudates, effects on nitrogen fixation, rhizosphere microorganisms 4237.
 Triticum aestivum, Gaumannomyces graminis infection, bacteria antagonism, clays effects on 3008.
 Triticum, freeze-thawing effects on Cephalosporium gramineum infection 376.
 vesicular-arbuscular mycorrhizas spreading, phosphorus effects on, mathematical models 2329.
 Vigna, genotypes, Rhizobium, nitrogen fixation 3234.
 volume, Glycine max, soybean mosaic virus infection effects on 328.
 Zea mays, inoculum, Pseudomonas, association, Rhizobium, methodology 3548.
 Zea mays, nitrogen fixation 8699.
 Zea mays, plant diseases, Rhizoctonia solani, Rhizoctonia zeae, interaction, herbicides 5706.
 Zea mays, Sorghum bicolor, nutrient uptake, role, Azospirillum brasilense 6988.
 Zostera marina, nitrogen fixation 8696.
- Rootstocks,**
 Malus, disease resistance, canker, Basidiomycetes 2259.
- Roquefortine,**
 biosynthesis, association, oxaline, Penicillium oxalicum 6698.
 biosynthesis, Penicillium crustosum 4896.
- Roridin A,**
 being dehydrogenase active sites, Saccharomyces cerevisiae 7625.
- Rosa,**
 canker, disease control, fungicides 1410.
 Diplocarpon rosae infection effects on phylloplane microorganisms population dynamics 2200.
 disease control, powdery mildew, Sphaerotheca pannosa var. rosae 9385.
 cuticular waxes, broom, mycoplasma-like organisms 5786.
 powdery mildew control, fungicides 5044.
- Rosa laxa,**
 Phragmidium mucronatum, rust, fungicides disease control 4115.
 Phragmidium mucronatum rust, pathology 4045.
- Rosaceae,**
 Erwinia amylovora isolation, characterization 419.
 rust susceptibility, relationship taxonomy 2201.
- Rosamicin,**
 biosynthesis, Micromonospora rosaria, media (culture) 2726.
- Rosaramicin,**
 antibacterial activity, Campylobacter fetus subsp. jejuni, Campylobacter fetus subsp. intestinalis 8863.
 antibiotic resistance, Ureaplasma urealyticum 2397.
- Rosaramycin,**
 erythromycin, tetracycline, spectinomycin, antibiotic sensitivity testing comparison, Mycoplasma pneumoniae 6092.
- Rosette,**
 Rickettsia-like organisms, vectors, Plesma quadratum, Beta vulgaris 6810.
- Rosoxacin,**
 antibacterial activity, urinary tract clinical isolates, nalidixic acid resistance 5195.
- Ross River virus,**
 polyarthritis, detection, immunoglobulin M serum levels, enzyme-linked immunosorbent assay, man 9834.
 polyarthritis, detection, immunoglobulin M serum levels, enzyme-linked immunosorbent assay, man 9834.
- Rot,**
 Allium cepa, Pseudomonas marginata, association, Pseudomonas aeruginosa browning 3063.
 Botryodiplodia theobromae, bananas, post-harvest decay, fungicides control 5804.
 Botrytis allii, disease resistance, Allium cepa 3986.
 Botrytis allii, soil-borne diseases, inoculum persistence, Allium cepa 2220.
 Botrytis cinerea, Vitis vinifera fruits, agricultural practices effects on pathogenicity, USA, California 7885.
 Colletotrichum gloeosporioides, Cruciferae leaves, detection methodology 9447.
 Conolus versicolor, Poria placenta, lignocellulose biodegradation, comparison, softwoods 170.

Rot, (continued)

- Erwinia carotovora subsp. carotovora, temperature, wound healing, susceptibility, Solanum tuberosum 3062.
 Erwinia chrysanthemi, disease resistance, Solanum tuberosum subsp. andigena 3132.
 Glomerella cingulata, Capsicum frutescens, association, iron 3999.
 Hevea brasiliensis, Phellinus noxius, Rigidiopsis lignosus, pathogenesis 5081.
 hypocotyls, Fusarium oxysporum, etiology, Pinus lambertiana 4180.
 Macrophomina phaseolina, seed-borne diseases, pathology, Sesamum indicum 5022.
 Phytophthora, Asparagus officinalis 9383.
 Phytophthora cactorum, effects on, Fragaria, yield 5755.
 Phytophthora megasperma var. sojae, Glycine max 3920.
 potatoes, effects on fermentation 8413.
 Pythium, biological control, association, Pseudomonas antagonism, Trichoderma hamatum, Pisum sativum seeds 5820.
 Pythium, biological control, Enterobacter cloacae seed treatments, Beta vulgaris, Cucumis sativus, Pisum sativum 9481.
 Trichothecium roseum, post-harvest decay, potatoes 1325.
 Washingtonia buds 1256.
 yeasts, seasonal variation, Opuntia stricta, food sources, Drosophila 3048.
- Rotavirus,**
 antibodies, detection, use, immunofluorescence+microplates 4471.
 detection, feces, enzyme-linked immunosorbent assay 9011.
 double-stranded RNA, extraction methodology 6292.
 serotyping, enzyme-linked immunosorbent assay 1743.
 staphylococcus, protein A, agglutination, assays 8105.
- Rotavirus (human),**
 detection, agglutination, sheep red blood cells, antibodies coatings 9856.
 detection, enzyme-linked immunosorbent assay, solid phase methods, glass beads 5370.
 feces, detection, methodology comparison, man 9864.
 glycoproteins, purification, characterization, cell culture 7300.
- Rotavirus (simian),**
 concentration, drinking water, membrane filtration, flocculation 3538.
- Rotavirus (simian) SA11,**
 isolation methodology, estuaries sediments 8106.
 morphogenesis, glycoproteins, role, infectivity, tunicamycin, effects on 4313.
- Rotylemyces reniformis,**
 Verticillium dahliae infection, Gossypium hirsutum, effects on disease resistance 8612.
- Rous sarcoma virus,**
 antiviral activity, macroline antibiotics 7941.
 transformation, chickens embryo cells, antiviral activity, 2-nitronaphthofuran derivatives 3362.
- Row width,**
 Rubus idaeus, role, disease control, spur blight, USA, Ohio 7734.
- Rowattine,**
 treatment, urinary tract infection, man 2430.
- Rubber,**
 biodegradation, Deuteromycetes 1994.
- Rubella,**
 immune status determination, hemagglutination inhibition, immunofluorescence, latex agglutination, man 9842.
 man, immunoglobulins specificity, detection, enzyme-linked immunosorbent assay 3531.
- Rubella virus,**
 antibodies, detection, agglutination methodology 9836.
 immunoglobulin G, detection, enzyme-linked immunosorbent assay, antigens attachment methodology 9851.
 rubella, immune status determination, hemagglutination inhibition, immunofluorescence, latex agglutination, man 9842.
 rubella, man, immunoglobulins specificity, detection, enzyme-linked immunosorbent assay 3531.
 serum antibodies, immune status, comparison, enzyme-linked immunosorbent assay, indirect hemagglutination, hemagglutination inhibition 9837.
 structural proteins identification, immunoprecipitation 1740.
 vaccines, immunogenicity, storage effects on 4429.
- Rubidium,**
 glutamate dehydrogenase (NADP⁺) activation, Neurospora crassa 4620.
- Rubromycin,**
 Actinomadura antibiotic sensitivity testing 6109.
 derivatives, synthesis, antibacterial activity, Bacteroides mycoides 2592.
 N-monoethyl derivatives, characterization, antibacterial activity, Mycoplasma mycoides 781.
 titration preparation methodology 6231.
- Rubrofusarin,**
 Fusarium culmorum biosynthesis 7016.
- Rubus,**
 Didymella applanata infection, disease resistance 458.
 disease resistance, yellows, etiology, raspberry bushy dwarf virus 464.
 infection, vein banding virus 2180.
 Kuethnia ureidinis leaf rust, weed control, biological control, USA, Hawaii 9410.
 nodules, ectomycorrhizas, Basidiomycetes 3208.
 Peronospora sparsa infection, oospores characterization 3997.
 stunt, mycoplasma-like organisms, disease transmission, Allium mayri vectors 2169.
 stunt, mycoplasma-like organisms, Rhipsalis spumarius vectors 3057.
- Rubus fruticosus,**
 Phragmidium violaceum rust, host-pathogen interactions analysis methodology 9440.
- Rubus idaeus,**
 disease control, antifungal agents 487.
 disease resistance, Botrytis cinerea infection 466.
 raspberry bushy dwarf virus infection, fields 5441.
 rhizomes, overwintering, mycoplasma-like organisms 6816.
 spur blight, row width, role, disease control, USA, Ohio 7734.
- Rumen,**
 anaerobic bacteria, storage, viability 1802.
 bacteria, enumeration, media methodology 9890.
 comparison, digestion (anaerobic), oxygen effects on methanogenesis, spectrometry 9629.
 fluids, cattle, bacteria proteins determination methodology 5408.
 fluids media, Ruminococcus albus cellulose digestion 8431.
 methanogenesis, oxygen inhibition, in vitro 8058.
- Rumen bacteria,**
 proteinase, structure-activity relationships 2793.
- Rumen microorganism,**
 bacteria, avoparcin effects on growth 8035.

Rumen microorganisms, (continued)

bacteria, feeds diammoniomelic acid content effects on, role, markers, production 6680.
biodegradation, *Vitis vinifera* stems, oxidation pretreatment 2009.
carbohydrate-degrading bacteria, biodegradation, cotton, pretreatment, ozone, sodium hydroxide 1062.
cattle, formaldehyde effects on proteins metabolism 4857.
cattle, proteolytic bacteria, media (isolation) use ribulosebiphosphate carboxylase 7243.
enumeration methodology 9869.
media nutrient requirements, counting methods, cellulose biodegradation 10007.
media effects on cellulose biodegradation 9260.
pure culture, carbohydrates effects on cellulose digestion 8425.
sheep, digestibility, *Gossypium hirsutum* crop residues, pretreatment, ozone, sodium hydroxide 5633.
sheep, digestibility, *Gossypium hirsutum* crop residues, pretreatment, ozone, sodium hydroxide 5634.
sheep, feeds, crop residues, digestibility 4870.
straw biodegradation, association, hydrolysis, oxidation 4751.
Rumex acetosella, disease reservoirs, tomato ringspot virus, prunus 1209.
Ruminantia,
Pleuronotus oestralus + *Erwinia carotovora*, culture, effects on, nutritive value, *Triticum aestivum*, straw 254.
Ruminococcus albus, biodegradation, *Medicago sativa* cell walls cellulose 9259.
carbohydrates effects on cellulose digestion 8425.
cellulose degradation 5601.
cellulose digestion, rumen fluids media 8431.
Ruminococcus flavefaciens, carbohydrates effects on cellulose digestion 8425.
nutrient requirements, media (culture) 9891.
rumen microorganisms, avoparcin effects on growth 8035.
Rumohra adiantiformis, post-harvest decay, rhizoctonia, *Cylindrocylindrium pteridis*, *Cylindrocylindrium heptaseptatum*, pathogenicity, symptoms 1326.
Rust,
Arachis, disease resistance 4082.
Chrysanthemoides monilifera subsp.*monilifera*, *Aecidium osteospermi* infection, pathogenesis 427.
Chrysomya weirii, pathology, *Picea* pungen 8659.
Coffea arabica, mathematical models, incidence *Hemileia vastatrix* infection 2150.
Cronartium comptoniae, association, *Phellinus pini*, pathology, *Pinus banksiana* 545.
Cronartium comptoniae, pathology, *Pinus banksiana* 4155.
Cronartium quercuum f.sp.*fusiforme*, aeciospores, inoculum, etiology, *Quercus* 2322.
Cronartium quercuum f.sp.*fusiforme*, disease resistance, *Pinus taeda* 5805.
Cronartium quercuum f.sp.*fusiforme*, *Quercus* seedlings, aeciospores inoculum 544.
Cronartium quercuum f.sp.*fusiforme*, triadimefon, disease control, *Pinus elliotii* var.*elliottii* 9516.
Cuminella, *Berberis*, *Mahonia*, taxonomy 423.
disease resistance, *Dactylis glomerata*, screening, phenotypes, genotypes 6856.
disease resistance, plant breeding, *Antirrhinum* 3140.
Emex australis, *Uromyces rumicis* infection, pathogenesis, effects on dispersal 425.
evolution, competition 6764.
Huei, *Leguminosae*, bioassays, detection, chitin 6737.
Gopiana, *Phialospora*, *Uredo spinulosa* sp.nov, host range, *Discorea* 4013.
Gramineae, disease spread, models 366.
Gramineae, disease spread, monitoring, weather satellites 1166.
haustoria growth, necrosis, *Vigna unguiculata* 3922.
Hemileia vastatrix, *Coffea arabica*, epidemiology 5015.
Hemileia vastatrix, *Coffea*, Mexico 5682.
interaction, barley yellow dwarf virus, *Puccinia recondita* f.sp.*tritici*, *Triticum aestivum*, *Puccinia hordei*, *Hordeum vulgare*, *Puccinia coronata* f.sp.*avenae*, *Avena sativa*, pathology 344.
Melampsora lini, histology, ultrastructure, leaves, *Linum usitatissimum* 9401.
Mintha, *Puccinia menthae* infection, pathogenicity, host specificity 431.
pathogenesis, mathematical models 3598.
Peridermium betheli, association, *Aroclathium americanum* + *Pinus contorta* 6932.
Phakopsora pachyrhizi, disease resistance inheritance, genetic analysis, *Glycine max* 6858.
Phakopsora pachyrhizi, *Glycine max* leaves, microscopy analysis 8543.
Phaseolus vulgaris, developmental stages, association, susceptibility, *Vigna sinensis* rust 6742.
Phaseolus vulgaris, *Uromyces phaseoli* inoculation methodology 5685.
Phragmidium mucronatum, *Rosa laxa*, fungicides disease control 4115.
Phragmidium mucronatum, *Rosa laxa*, pathology 4045.
Phragmidium violaceum, *Rubus fruticosus*, host-pathogen interactions analysis methodology 9440.
Poaesea, incidence, Africa, East 9365.
Populus, epidemiology, Canada 4170.
Puccinia arachidis, disease resistance, *Arachis hypogaea* 4083.
Puccinia arachidis, disease resistance, cultivars screening, *Arachis hypogaea* 9475.
Puccinia arachidis, survival, *Arachis hypogaea*, pathology 5679.
Puccinia, *Gramineae*, reproduction, genetic variance 1160.
Puccinia graminis f.sp.*tritici*, disease resistance, *Triticum aestivum*, genetic factors 3125.
Puccinia graminis f.sp.*tritici*, *Triticum aestivum*, structure relationship 351.
Puccinia graminis subsp.*graminicola*, *Gramineae*, evolutionary genetics, ecology 3004.
Puccinia helianthi, disease resistance, germplasm screening, *Helianthus annuus* 4064.
Puccinia hordei, disease resistance, *Hordeum vulgare*, Pa gene 1349.
Puccinia horiana, *Chrysanthemum* 2204.
Puccinia horiana, *Chrysanthemum*, disease resistance, *Chrysanthemum*, *Dianthus caryophyllus* 8609.
Puccinia melanocephala, pathology, *Saccharum* 1176.
Puccinia polyspora, *Zea mays*, incidence, relationship, weather, USA, Indiana 6765.
Puccinia recondita *ureidinia* growth rate association *Triticum aestivum* leaves 6748.
Saccharum, overwintering, USA, Mississippi 3016.
susceptibility, relationship taxonomy, *Rosaceae* 2201.
Tranzschelia discolor, host range, sporulation, *Prunus domestica* subsp.*domestica*,

Rust, (continued)

Prunus domestica subsp.*insititia* 3967.
Triticum aestivum, fungicides treatment, association grain quality 7667.
Uromyces appendiculatus, interspecific relationships, *Verticillium lecanii*, population dynamics, *Phaseolus vulgaris* 2108.
Uromyces appendiculatus var *appendiculatus*, *Phaseolus vulgaris*, chlorothaloni disease control 9491.
Uromyces appendiculatus, *Vigna sinensis*, Oman, new records 7661.
Uromyces phaseoli, *Phaseolus vulgaris*, biological control, *Bacillus subtilis* 9498.
Uromyces striatus, *Medicago sativa*, Egypt 5670.
Uromyces transversalis, *Gladiolus*, Brazil, new records 2203.
Uromyces viciae-fabae, disease resistance, inheritance, *Vicia faba* 2253.
Zea mays, pathogenesis 1168.
Ruta graveolens, acid + fungi mixed culture, acridone epoxides biosynthesis 7266.
Ryegrass mosaic virus, detection, enzyme-linked immunosorbent assay, *Lolium multiflorum*, *Lolium perenne* 6758.
Ryegrass seed-borne virus, detection, enzyme-linked immunosorbent assay, *Lolium multiflorum*, *Lolium perenne* 6758.

Saccharomyces

ascospores heat resistance, erythromycin inhibition sporulation 1631.
ethanol fermentation, factors affecting 1048.
ethanol production 7527.
ethanol production, carbohydrates conversion 4738.
ethanol production, factors affecting 1046.
ethanol production, role, membranes fatty acids 6633.
ethanol production, use, bamboo substrates 9225.
food contamination, fruit juices, Venezuela 7574.
gas production, yogurt, identification 4840.
inoculum levels effects on ethanol yield 4729.
invertase biosynthesis, 8-hydroxyquinoline effects on 9184.
mixed culture, ethanol production 4736.
phenylacetylcarbinol production 1974.
safe fermentation, ethanol tolerance enhancement, Tween 80 role 9244.
species, proteins, electrophoresis differentiation, classification 8208.
storage, biomass chemical composition, wine fermentation residues 7512.
viability, measuring techniques 5432.
wild types, panthothenic acid, media (selective) 3628.
wine fermentation, role sterols 4743.
wine production, characterization 5568.
Saccharomyces aceti, proteins, electrophoresis differentiation, classification 8208.
Saccharomyces ananensis, immobilization, β -D-galactosidase purification methodology 901.
Saccharomyces ballii, acidity, heat inactivation, fruit juices 5636.
heat inactivation, fruit juices 2039.
Saccharomyces bayanus, glucose substrates concentration, relationship, ethanol inhibition 2870.
immobilized cells, ethanol fermentation, by-products 8396.
proteins, electrophoresis differentiation, classification 8208.
Saccharomyces carlsbergensis, arginyl-RNA synthetase, purification, physicochemical properties, mechanisms 4600.
calorimetry, methodology, characterization 7272.
cell disruption, methodology glass beads 6337.
ethanol production, nutrient enrichment effects on 8408.
extracts, chromium, containing complexes, separation methodology 8155.
growth, *Fusarium* T-2 toxin effects on 3875.
1-hydroxy-1-phenylpropanone production, pyruvate decarboxylase activity, pyruvate levels effects on 7501.
proteinase, immunoassays, beer 7322.
pyruvate dehydrogenase multienzyme complexes, subunits molecular weight, kinetics, comparison *Saccharomyces cerevisiae* 52.
RNA, isolation, ion-exchange chromatography 5480.
vacuoles, adenosinetriphosphatase, purification, characterization 45.
Saccharomyces cerevisiae, acetyl-CoA synthetase, purification, characterization 8221.
acid phosphatase biochemical characteristics 7428.
acidity, heat inactivation, fruit juices 5636.
aldehyde dehydrogenase (NAD(P)⁺), purification, characterization 4648.
aminopeptidase Co, characterization 1923.
antifungal activity, benzenedithiols 2473.
antifungal activity, patulin 2070.
antifungal agents effects on sterols biosynthesis 5203.
antimicrobial activity, daunomycin, adriamycin, ascorbic acid, dimethyl sulfoxide, effects on 8033.
antimicrobial activity, pectinolate 8910.
ascospores, isolation 1810.
asparaginase, inactivation, pH effects on 5519.
bacteria β -D-galactosidase activity, measuring techniques 3622.
batch culture, quality control, population dynamics 3818.
biochemical characteristics, alcoholic beverages, fermentation 243.
biomass production, ammonium levels 4534.
biomass production, antifoam agents 3834.
calorimetry, methodology, characterization 7272.
carboxylesterase, role, esters equilibrium, relationship, sugars fermentation 2860.
CD-phosphatidylglycerol-inositol 3-phosphatidyltransferase, purification, characterization 3682.
cell death, role sulfur dioxide 1563.
cell disruption, methodology glass beads 6337.
cell distribution, methodology 2724.
cell surface antigens, antigenic determinants, physicochemical properties 6365.
cellulose fermentation, β -D-glucosidase, ethanol, effects on glucose biosynthesis 4705.
cellulose, films, immobilized cells, ethanol, production 6632.
chromium resistance, detoxification mechanisms 3272.
cinamic acid decarboxylation 1989.
compounds reduction 7281.

Saccharomyces cerevisiae, (continued)

contamination, coliforms, acetic acid reduction 4773.
 contamination, tablets, pressure effects on 3459.
 continuous culture methodology 8087.
 continuous culture, oxygen effects on 9994.
 continuous culture, oxygen uptake measuring techniques 900.
 copper thionein complex, reconstitution, *Rhus vernicifera* 6497.
 cytochrome b cytochrome c1 complex, ferricyanide reduction 7291.
 cytochrome c folding kinetics, structure intermediates, absorption spectroscopy, fluorescence 4559.
 cytochrome c, heme iron coordination geometry, N.M.R. 3643.
 cytochrome c, iodacetamide chemical modification, folding kinetics, fluorescence, structure-activity.
 cytochrome P-450 inhibition, buthionate role 9488.
 cytochrome P448 immobilization 1927.
 cytochrome P450, continuous culture 1930.
 dehydration, fatty acid composition, relationship, viability 1839.
 dehydrogenase, active sites, binding mycotoxins, *Fusarium*, *Myrothecium* 7625.
 dihydroliopamide reductase (NAD⁺), purification, characterization 4669.
 dimethyl dicarbonate, fungicidal activity, wine sterilization 2868.
 encapsulation, protoplasts, products, recovery, methodology 9067.
 ergosterol biosynthesis defective mutant, relationship sterols production 9187.
 ethanol fermentation, by-products inhibition effects on 9237.
 ethanol, fermentation, corn 3811.
 ethanol fermentation, corn, factors affecting 8414.
 ethanol fermentation, maintenance energy, biomass concentration, calorimetry 7528.
 ethanol fermentation, *Saccharum officinale* crop residues, fermenters 2873.
 ethanol fermentation, wood, acids, hydrolysis 4734.
 ethanol fermentation yield, polymers effects on 5573.
 ethanol, *Helianthus tuberosus* carbohydrates 2389.
 ethanol production, aerobic conditions, mitochondria mutants 3749.
 ethanol, production, bioreactors 7513.
 ethanol production, *Trichoderma*, wood cellulose hydrolysis 3750.
 ethanol uptake, fermentation relationship 3246.
 exo-1,3- β -D-glucanase, self-association 44.
 fermentation, beets, ethanol production 7508.
 fermentation, wine, foaming assays 3752.
 food wastes fermentation, antiviral activity 7595.
 β -D-fructofuranosidase, enzymatic activity assays 5490.
 β -D-fructofuranosidase activity, gels immobilization, methodology 4532.
 β -D-fructofuranosidase, immobilized enzymes, kinetics, heat inactivation 9150.
 β -D-fructofuranosidase polymorphism correlation carbohydrate composition phosphorylation, isoelectric focusing 65.
 fungi, inhibition, sterols, demethylation 4117.
 galactokinase, purification, characterization 6420.
 galactose-1-phosphate uridylyltransferase, UDP-glucose 4-epimerase, purification, characterization 4655.
 glucose substrates concentration, relationship, ethanol inhibition 2870.
 glucose transport, ethanol effects on 1518.
 glutaminase, kinetics 1867.
 glucaldehyde-phosphate dehydrogenase arginine residues, 2,3-butanedione chemical modification, effects on physicochemical properties, kinetics 7352.
 glucaldehyde-phosphate dehydrogenase substrate structure, binding antibodies, rabbits 7332.
 glycofen assays 4547.
 growth, *Fusarium* T-2 toxin effects on 3876.
 growth, gases fluidized beds, particles 6353.
 growth, population dynamics, reactors, mathematical models 3633.
 growth, sodium hypochlorite, effects on, lysine, levels 17.
 L-gulonolactone oxidase, purification, characterization 56.
 heat inactivation, fruit juices 2039.
 histidinol dehydrogenase fragments, activity 2760.
 hybridization, protoplast fusion, genetic engineering, association, ethanol production 6402.
 immobilization methodology, association, ethanol production 7217.
 immobilization, use, pectin, ethanol production association 6631.
 immobilized cells, acetaldehyde biosynthesis, ethanol biosynthesis 131.
 immobilized cells, alcohol dehydrogenase, NADH regeneration 4601.
 immobilized cells, biomass measurements, fermentation 7261.
 immobilized cells, ethanol biosynthesis, glucose fermentation 137.
 immobilized cells, fixation materials methodology 4513.
 immobilized cells, glycerol biosynthesis 127.
 immobilized cells, growth distribution, analysis methodology 9087.
 immobilized cells, hydrolysis, sucrose 3827.
 immobilized cells, methodology 4537.
 immobilized cells reactors, ethanol production 3743.
 immobilized cells, sterols transformation 4697.
 inactivation, food spoilage rates, incubation temperature effects on 2926.
 inorganic pyrophosphatase binding sites, terbium ions interaction 4667.
 isogenic, isolation methodology 4524.
 media (selective), wine, fermentation 8403.
 megamodulin, purification, characterization 5477.
 2-mercaptobenzeneethanethiol diesters antifungal activity 3340.
 microflora, grapes, wine 3758.
 mitochondria, coupling factor 1, purification, 5'-p-fluorosulfonylbenzoyl adenosine chemical modification 943.
 molasses fermentation 1991.
 NAD(P)⁺ nucleosidase, purification, characterization 6528.
 NADH dehydrogenase, purification, characterization 952.
 nucleoside monophosphate kinase, purification, characterization 6513.
 nutritive value, nutrients supplements, association, *Brachionus plicatilis* population growth 7604.
 nystatin uptake 8008.
 oxygen tension effects on ethanol fermentation 143.
 oxygenase, biodegradation, transformation, aromatic compounds, reviews 3667.
 petite mutant, sugar fermentation ability 9247.
 phosphatidy[2-³H]inositol production 979.
 6-phosphofructokinase, purification 1875.
 phosphofructokinase subunits, amino acid analysis, peptide mapping 941.
 phosphoglycerate kinase, amino acid sequence 2775.
 phosphorylase kinase, isolation, characterization 7359.
 plasma membranes, adenylate cyclase characterization 932.
 plasma membranes, freeze-fracture, crystal-optics, association, resistance evaporation use 4514.

Saccharomyces cerevisiae, (continued)

production, glucose-molasses, production 3806.
 protein kinase inhibitor, purification, characterization 6408.
 proteins, electrophoresis differentiation, classification 8208.
 protins release, detection, spectrophotometry 2710.
 pyridoxaminephosphate oxidase, purification, characterization 942.
 pyruvate dehydrogenase multienzyme complexes, subunits molecular weight, kinetics, comparison *Saccharomyces carlsbergensis* 52.
 rats, mutagens, association, cyanin activation, genetic analysis 4510.
 reduction, perfluoroalkyl ketones, β -(perfluoroalkyl)- β -ketoesters, (perfluoroalkyl)vinyl compounds 9221.
 respiration, fermentation heat, carbon sources 145.
 ribonuclease, heat shock induction 4689.
 RNA, isolation, ion-exchange chromatography 5480.
 RNA polymerase I, RNA polymerase II, activity, phosphorylation regulation 4599.
 mRNA (guanine-7-) methyltransferase, purification, characterization 8272.
 mRNA guanylyltransferase, purification, characterization 6510.
 selection, wine production, association, sterol composition 3759.
 separation techniques, fermentation media 9983.
 separation techniques, fermentation media 9984.
 squalene monooxygenase (2,3-epoxidizing), biosynthesis, activity, oxygen role 8216.
 succinyl-CoA synthetase (ADP-forming), purification, characterization 7362.
 superoxide dismutase, amino acid sequence 27.
 superoxide dismutase, purification, characterization 25.
 superoxide dismutase, structure, E.S.R. 6470.
 tetraploid characterization, relationship, breweries 2863.
 toxins, purification, characterization 1097.
 transketolase, active sites arginine residues, 2,3-butanedione chemical modification, effects on kinetics 7355.
 transketolase, purification, characterization 6425.
 transketolase, substrate specificity 7353.
 transketolase, X-ray crystallography 6551.
 transketolase, 2,3-butanedione chemical modification, effects on kinetics 6555.
 valine effects on, leucine conversion, 3-methyl-1-butanol biosynthesis, nutrient requirements 3724.
 viability, freeze-thawing, skim-milk 220.
 Warburgia, sesquiterpenes, antifungal activity 8791.
 wild type, comparison, mitochondria mutants, ethanol production 8409.
 wine, fermentation, foams, protein composition 3754.
 wine fermentation, interaction *Leuconostoc oenos* 4742.
 wort fermentation, temperature effects on 7531.
 wort fermentation, atmospheric pressure effects on 9229.
Saccharomyces dairense,
 factors affecting, food spoilage, coleslaw 8479.
 spoilage, mayonnaise 3812.
Saccharomyces diastolicus,
 α -amylase, exo-1,4- α -D-glucosidase, production 3691.
 ethanol, *Helianthus tuberosus* carbohydrates 2389.
 fermentation, beets, ethanol production 7508.
 protoplasts fusion, transformation, exo-1,4- α -D-glucosidase production 7323.
Saccharomyces exiguus,
 factors affecting, food spoilage, coleslaw 8479.
 spoilage, mayonnaise 3812.
Saccharomyces fragilis,
 nutrient requirements, growth, proteins production 926.
 single-cell protein, nutritive value, feeding trials, chickens 7608.
 UDP-glucose 4-epimerase, 1-anilino-8-naphthalenesulfonic acid interaction, fluorescence 5494.
Saccharomyces hirsuta subsp. kobensis,
 sporadic A derivatives biosynthesis 4395.
Saccharomyces litoralis,
 β -D-galactosidase, lactose hydrolysis, whey 8471.
Saccharomyces lipolytica,
 single-cell protein production, association, olives food processing waste water 8212.
Saccharomyces oliviformis,
 culture, effects on alcoholic beverages food quality 1050.
 fermentation, purification *Beta vulgaris* dyers 7470.
 morphology, fermentation, champagne 1990.
 wine fermentation, *Botrytis cinerea* activators effects on 3760.
Saccharomyces peroxidase,
 cytochrome peroxidase, assays 5517.
Saccharomyces rosel,
 ethanol production, use, *Helianthus tuberosus* plant extracts, inulin 8410.
Saccharomyces rouxi,
 growth patterns, isolation, chocolate 4822.
 proteins, electrophoresis differentiation, classification 8208.
Saccharomyces sake,
 antibiotic F-16-2 antifungal activity 8031.
 antibiotic F-16-2 antimicrobial activity, association sake 8024.
 antibiotic F-16-2 resistant mutant screening 7896.
Saccharomyces uvaram,
 ethanol tolerance mutants, selection methodology 4520.
Saccharomyces uvarum,
 immobilized cells, ethanol production 6634.
 + Penicillium funiculosum, ethanol production, cellulose, fermentation, hydrolysis 8401.
 proteins, electrophoresis differentiation, classification 8208.
 pyridoxine bioassays 2717.
 respiration, measuring techniques, use, tetrazolium salts 9088.
 sulfur dioxide formation, wort fermentation, dissolved oxygen effects on 7518.
 wort nutrient requirements, ethanol levels, brewing 7516.
Saccharomyces vini,
 morphology, fermentation, champagne 1990.
Saccharomycopsis fibuliger,
 + *Zymomonas mobilis*, mixed culture, starches conversion, ethanol 7529.
Saccharomycopsis lipolytica,
 citric acid biosynthesis, association, utilization, glucose, alkanes 6396.
 citric acid production 3645.
 citric acid production 3647.
 extracellular enzymes, proteinase, production, purification, characterization 3681.
 homoisocitrate dehydrogenase, purification, characterization 938.
 mutants, proteinase, production, characterization 1921.
 overproduction, isocitric acid, citric acid, enzymes activity association 5483.

- Saccharomycopsis lipolytica**, (continued)
tracylglycerol lipase, purification, characterization 6463.
- Saccharopolyspora**,
biosynthesis, saccharocin, antibacterial activity 8886.
- Saccharopolyspora hirsuta**,
antibiotic KA-5885, biosynthesis, isolation, characterization 8891.
biosynthesis, vanoxonin, isolation, inhibition, tumors thymidylate synthase 7449.
- Saccharopolyspora hirsuta subsp. kobensis**,
synthesis, sporaricin A fluorine derivatives 8876.
- Saccharum**,
bagasse, composts production, microorganisms decomposition activity 7560.
ratoon stunt, bacteria, disease control, heat treatments 9468.
rust, overwintering, USA, Mississippi 3016.
rust, *Puccinia melanocephala*, pathology 1176.
smut, disease resistance, heritability, diseases grades comparison yield 6859.
Ustilago scitaminea isolates differentiation, greenhouses 5001.
- Saccharum officinale**,
bagasse, production, ethanol, yeasts 5571.
buds, glycosides, disease resistance markers, smut, Ustilago scitaminea 9359.
crop residues, ethanol fermentation, *Saccharomyces cerevisiae* 2873.
Puccinia melanocephala leaf rust pathogenesis 5716.
ratoon stunt, bacteria, effects on, yield 2139.
soil, rhizoplane microorganisms, *Streptomyces*, characterization 6978.
Ustilago scitaminea smut control, Hawaii 5709.
- disease resistance, smut 2258.
disease resistance, smut, Ustilago scitaminea 470.
fermentation, post-harvest, decay, microorganisms 439.
molasses, ethanol fermentation technology, yeasts 142.
molasses, yeasts, oxygen tension effects on ethanol fermentation 143.
phylosphere, nitrogen-fixing bacteria, nitrogen fixation 9590.
rhizosphere, fungal flora, surveys 7813.
smut, Ustilago scitaminea 1175.
smut, Ustilago scitaminea races characterization, neutron activation analysis 6760.
tissue culture, sugarcane mosaic virus survival 1154.
- Saccharocin**,
Saccharopolyspora biosynthesis, antibacterial activity 8886.
- Safety**,
biological control, microorganisms 3742.
equipment, laminar air flow, bacteria assays 5332.
- Safety cabinets**,
laminar air flow, pathogens, safety regulations 5337.
- Safety regulations**,
biological control, pathogens 1025.
safety cabinets, laminar air flow, pathogens 5337.
- Safrazmycin A**,
Streptomyces labulandulae, isolation, characterization, antitumor activity 2830.
- Sagamycin**,
antibiotic synergism, fosfomycin, antibacterial activity 8023.
biosynthesis, *Micromonospora sagamiensis*, mutants, cobalt, regulation 6195.
- Sagunus fuscoicollis**,
chlorine, effects on, hepatitis A virus, infectivity, experimental infection 2488.
- Sagunus labiatus labiatus**,
chlorine, effects on, hepatitis A virus, infectivity, experimental infection 2488.
- Sagunus nigricollis**,
chlorine, effects on, hepatitis A virus, infectivity, experimental infection 2488.
- Sake**,
antibiotic F 16-2 antimicrobial activity, lactic acid bacteria, *Saccharomyces* sake 8024.
fermentation, *Saccharomyces*, ethanol tolerance enhancement, Tween 80 role 9244.
- Sakumycin**,
antifungal activity, *Botrytis cinerea*, defense secretions, *Ribes nigrum* 1379.
antifungal activity, *Botrytis cinerea*, *Ribes nigrum* leaves 1332.
- Salami**,
food contamination, ripening, bacteria 2030.
- Salicin**,
Trichoderma, immobilized cells, β -glucosidase, hydrolysis 3791.
- Salicylic acid**,
Nicotiana tabacum hypersensitive response, tobacco mosaic virus, effects on 4095.
- Salicylate**,
biodegradation, *Aspergillus niger* 3774.
- Saline environments**,
enterovirus, microbial pollution, survival 1720.
soil, isolation, bacteria 3196.
- Saline water**,
clay, effects on denitrifying bacteria 5964.
- Salinity**,
Distichlis spicata, vesicular-arbuscular mycorrhizas, effects on 5098.
effects on, *Rhizobium*, growth, nitrogen fixation, soil 557.
effects on sewage sludge land disposal, decomposition, nitrogen mineralization 8955.
Rhizobium japonicum symbiosis Glycine max, effects on nitrogen fixation 7830.
Vibrio ecological distribution, coastal waters 6259.
- Salinity tolerance**,
Rhizobium, symbiosis, *Lens culinaris*, effects on 5955.
- Salinomycin**,
administration, effects on intestinal microflora, anaerobic bacteria, pigs 5624.
feeding, chickens, effects on *Streptococcus*, coliforms, antibiotic resistance 3289.
- Saliva**,
Streptococcus mutans levels, stannous fluoride mouthwashes effects on, man 3500.
Streptococcus mutans, man, fluoride effects on 3502.
- Salix alba**,
Erwinia salicis, detection, enzyme-linked immunosorbent assay, Watermark disease, *Salix alba* 6919.
Watermark disease, *Erwinia salicis*, antigens detection, enzyme-linked immunosorbent assay 6919.
- Salmo gairdneri**,
infectious pancreatic necrosis virus carriers, cell culture assays 5376.
redmouth, *Yersinia ruckeri*, vaccines preparation, immunogenicity 8925.
- Salmonella**,
Ames test, methodology, mutagenicity testing 845.
- Salmonella**, (continued)
animal isolates, antibiotic resistance, antibiotic sensitivity testing, surveys 634.
animal isolates, antibiotic resistance, surveys 3287.
antibacterial activity, bicyclomycin 2595.
antibacterial activity, temocillin 5254.
antibiotic resistance, incidence, sewage 6016.
antibiotic resistance, role, plasmids 6017.
antibiotic resistance, screening 635.
antibiotic sensitivity testing 5232.
antibiotic sensitivity testing 6111.
antibiotic sensitivity testing, meat isolates 9720.
antibiotic sensitivity testing, mecillinam 3407.
antibiotic sensitivity testing methodology comparison 6990.
antibiotic synergism, mecillinam + ampicillin, antibacterial activity 9758.
carriers, contamination, finger, man 2703.
cefotaxime, moxalactam, antibacterial activity comparison, antimicrobial agents 6126.
chickens carcasses, incidence 195.
clinical isolates, antibiotic sensitivity testing 6112.
contamination, chickens, abattoirs 4845.
contamination, fertilizers, organic compounds 1732.
contamination, meat, public health surveys 1081.
contamination, sausages 9267.
control, meat, radiation treatment, reviews 8481.
detection methodology, enzyme immunoassay, use, myeloma proteins monoclonal antibodies 7241.
detection, phases, high-performance liquid chromatography 3579.
disease transmission, role, milk, reviews 211.
disinfection, sewage sludge 8936.
enteritis, clinical isolates incidence, antibiotic resistance, man 8733.
enterotoxins characterization 6707.
feces, man, water resources, quantification 5322.
feeds contamination 4861.
feeds inoculation 253.
food contamination, beans sprouting 3831.
food contamination, cheese 8487.
food contamination, chickens carcasses, detection methodology 1077.
food contamination, chickens carcasses, radiation, temperature, effects on 4786.
food contamination, conferences 5453.
food contamination, cooked poultry 4807.
food contamination, fertilizers role 7571.
food contamination, ice cream 6659.
food contamination, liquids egg production 203.
food contamination, packaging, beef 224.
food contamination, pork sausages 179.
food contamination, poultry 3830.
food contamination, poultry, meat industry 6663.
food contamination, sausages, isolation, media (enrichment) 4766.
food poisoning, association, temperature, epidemiology, British Isles 3828.
fosfomycin derivatives antibacterial activity 8890.
gastrointestinal tract clinical isolates, norfloxacin antibacterial activity 2455.
growth inhibition, meat products, sodium nitrite potassium sorbate use 3838.
hexachlorophene drug resistance, conjugation, R factors 6030.
identification, automated methods 861.
incidence, fertilizers, association, animals feces 2637.
infection fosfomycin, children, antibacterial activity, fosfomycin 6189.
isolates, animals, meat, feeds, serotyping 5527.
isolates, hospitals, antibiotic resistance 8732.
isolates, Netherlands, antibiotic resistance, incidence 5161.
isolation, animals food contamination, culture methodology 1088.
isolation, aquatic environment, methodology 3558.
isolation, chickens, media (enrichment) 9060.
isolation, feces, media (enrichment) 3617.
isolation, incidence, man, food, sewers, British Isles 1075.
isolation, media (enrichment) 9061.
isolation, sewage, media (enrichment) comparison 2675.
isolation, sewage sludge 6248.
isolation, sewage sludge, feeds, domestic animals 3461.
 β -lactamase inhibition, iodopencillanate, bromopencillanate 3404.
lipopolysaccharides antigenic determinants, binding, serum, bactericidal activity, mice 2452.
lipopolysaccharides electrophoresis 9045.
lysozymes, Ixodidae, eggs, antibacterial activity 1552.
media (enrichment), isolation, meat 4789.
media (isolation), methodology, use, Rappaport's medium 8111.
media (isolation), use surfactants, antibacterial activity, meat 233.
media (selective), novobiocin 3596.
microbial pollution, lakes 1723.
microbial pollution, pollution monitoring, methodology, surface water 8117.
mutagenicity testing, methodology 9893.
nitradoze antibacterial activity 3328.
plasmids, trimethoprim drug resistance 4277.
polysaccharides biosynthesis 4703.
reduction, composting, sewage sludge 8938.
relationship, *Escherichia coli*, contamination, *Crassostrea virginica*, *Mercenaria campechiensis* 2042.
respiratory tract infection, bekanamycin treatment, man, antibacterial activity 6186.
- salmonellosis**, diagnosis methodology, X radiation probes, antibodies labelling 1799.
salmonellosis, disease control, contamination, abattoirs, turkeys 2050.
salmonellosis, food contamination, control programs, man 230.
salmonellosis, man, beef food contamination, epidemiology, plasmids characterization 8472.
salmonellosis, sheep, association, food contamination, man 3845.
serotypes, contamination, poultry carcasses 8485.
sewage treatment plants contamination, occupational hazards 1730.
strains, antibacterial activity, cotrimoxazole, gentamicin, tobramycin 8815.
strains, mutagenicity testing 3560.
sulfonamide susceptibility, association, cotrimoxazole drug resistance 6004.
toxins biosynthesis, cultural characteristics effects on 8519.
trisaccharides synthesis, antigen O antigenic determinants 2821.
- Salmonella adelaide**,
survival, soils (sandy), septic tanks association 1693.

- Salmonella anatum**,
antibiotic sensitivity testing, meat isolates 9720.
polysaccharides enzymatic synthesis 8331.
UDP-glucose 4-epimerase deficient mutant, antigen O polysaccharides biosynthesis, synthetic galactosyl (fucaprenyl) diphenolphosphate intermediates 7440
- Salmonella arizonae**,
growth conditions effects on heat resistance 1538.
- Salmonella cerro**,
contamination, seafood, frog legs 188.
- Salmonella cholerae-suis**,
Roccal-D antibacterial activity 7918.
- Salmonella concord**,
antibiotic sensitivity testing, meat isolates 9720.
- Salmonella dublin**,
infection, association cow's milk drinking, genitrics, man 5616.
- Salmonella enteritidis**,
activated sludge, removal 5314.
antibiotic sensitivity testing 2393.
enterotoxins biosynthesis, nutrient requirements 1105.
R factors, antibiotic resistance transfer, wastewater treatment 1548.
microbial contamination, seafood 2911.
- Salmonella heidelberg**,
antibiotic sensitivity testing, meat isolates 9720.
- Salmonella infantis**,
antibiotic sensitivity testing, meat isolates 9720.
- Salmonella krefeld**,
animal isolates, cotrimoxazole drug resistance, plasmids role 3278.
- Salmonella muenchen**,
contamination, seafood, frog legs 188.
- Salmonella minnesota**,
lipopolysaccharides, isolation, 3-deoxy-D-mannoctulosonic acid 6567.
lipopolysaccharides, 3-deoxy-D-mannoctulosonic acid composition 5536.
- Salmonella newport**,
endotoxins, association prostaglandins, characterization 8515.
- Salmonella paratyphi**,
antibacterial activity, chloramphenicol, thiamphenicol 756.
plants extracts antibacterial activity, Iran 2458.
- Salmonella pullorum**,
agglutination tests, methodology 2648.
- Salmonella saintpaul**,
decontamination, soybean milk, use, microwave radiation 3839.
heat resistance, liquid culture, Sucrose levels effects on 670.
- Salmonella stanley**,
antibiotic sensitivity testing, meat isolates 9720.
- Salmonella tuesday**,
media (isolation), identification, feces isolates, food poisoning, man 9921.
- Salmonella typhi**,
antibacterial activity, chloramphenicol, thiamphenicol 756.
antibiotic resistance, R factors 7876.
antigen Vi, enzyme-linked immunosorbent assay, detection, antibodies 9920.
chloramphenicol resistance 5154.
chlorophenicol resistance, clinical isolates, case reports 2416.
endotoxins, association prostaglandins, characterization 8515.
feces isolates association typhoid fever, antigens detection, use, agglutination 841.
identification, drug resistance, methodology 7255.
traveller's diarrhea, vaccines development, man 8048.
- Salmonella typhimurium**,
ampicillin antibiotic resistance, R factors 646.
antibacterial activity, potassium sorbate, butylhydroxyanisole, preservatives, poultry 2035.
antibiotic resistance, R factors 5159.
antibiotic sensitivity testing, meat isolates 9720.
antibiotics sensitization, role polymyxin B 7158.
bactericidal activity, magnesium chloride-riboflavin+aromatic compounds, photoactivation, media (culture) 8781.
cefuroxime, antibacterial activity 1812.
clinical isolates, antibiotic resistance, drug resistance 4282.
clinical isolates, antibiotic sensitivity testing 6112.
clinical isolates, India, drug resistance, R factors characterization 2409.
concentration, effects on mutation, Ames test 9023.
contamination, growth, beef, packaging 265.
correlation, animals, Basidiomycetes metabolism, hydrazine derivatives, toxicity, mutagenicity 1095.
cytosine deaminase, purification, characterization 2758.
drug resistance, association, plasmids, Kuwait 5150.
endotoxins, association prostaglandins, characterization 8515.
enterotoxins, isolation, characterization 4916.
enumeration, meat products 1083.
enzyme infectivity, ureidosuccinic acid dihydrazide effects on 6056.
gene mapping, genetic analysis, methodology, reviews 9052.
growth, food, mathematical models, water activity 8468.
growth, mayonnaise, meat, refrigeration 229.
indicator species, ground water microbial pollution 8979.
isolation, USSR epidemics, antibiotic resistance 5166.
 β -lactam antibiotics diffusion, cell membranes porins 718.
lactic acid biosynthesis 8206.
lipopolysaccharides, isolation methodology 8148.
media (enrichment) 3576.
NAD biosynthesis, association, nucleosides 1962.
nitrofurantoin reducease, isolation, characterization 9180.
1-nitropyrene reductase, assays, fluorometry 5021.
outer membranes, polymyxin B effects on 7159.
pH, temperature, effects on, growth, animal wastes, pigs 8954.
phosphoenolpyruvate-glucose phosphotransferase enzyme II-B (Glc), purification, assays 6413.
phosphoenolpyruvate-glucose phosphotransferase enzyme I, purification, characterization 6415.
phosphoenolpyruvate-glucose phosphotransferase enzyme III (Glc), purification, characterization 6417.
phosphoenolpyruvate-glucose phosphotransferase phosphocARRIER protein, purification, characterization 6416.
plasmids, trimethoprim drug resistance 4277.
poly(N-benzyl-4-vinylpyridinium bromide), removal, water treatment, methodology 9046.
tRNA (guanine-7)-methyltransferase, purification, characterization 6509.
- Salmonella typhimurium, (continued)**
survival, feeds, fishery products 3855.
survival, slurries, cattle animal wastes, isolation, drug resistance 2617.
thermal injury recovery, media (enrichment), media (selective) 3574.
trimethylamine-N-oxide reductase, purification, characterization 8263.
viability, food films, surfaces, refrigeration 2025.
viability, wastewater treatment 6244.
yogurt, lactic acid effects h 4811.
- Salmonella typhosa**,
antibacterial activity, β -hydroxycholesters derivatives 8752.
antibacterial activity, aminoacyl-cabazole derivatives 3330.
- Salmonella wien**,
strains, antibacterial activity, cotrimoxazole, gentamicin, tobramycin 8815.
- Salmonellosis**,
diagnosis methodology, X radiation probes, antibodies labelling 1799.
surveys, Salmonella contamination, abattoirs, turkeys 2050.
food contamination, control programs, man 230.
isolates, antibiotic resistance plasmids, structure, incidence 6025.
man, beef food contamination, epidemiology, plasmids characterization 8472.
sheep, association, food contamination, man 3845.
surveys, cattle, abattoirs, zoonoses, man 234.
- Salt**,
effects on, proteolysis, cheese, ripening 221.
- Salt marshes**,
factors affecting soil denitrification 2367.
Spartina alterniflora roots, localization, nitrogen-fixing bacteria 6967.
- Salts**,
alkaloids, antibacterial activity 7917.
bile, effects on recovery, Yersinia enterocolitica 672.
disease control, blight, Sclerotium rolfsii, Posa 1402.
filters, effects on poliovirus adsorption 3469.
heavy metals, Spiroplasma sensitivity 2441.
like flavorings, use food 4780.
roads, pollution effects, enzymatic activity, soil microorganisms 7801.
thiosemicarbazide, antibacterial activity 7923.
- Salvia officinalis**,
extracts, antimicrobial activity 1584.
- Salvinia molesta**,
Rhizoctonia solani infection, pathology 3096.
- Sampers**,
Erysiphe graminis, sporulation 4518.
- Sampling**,
air, foot-and-mouth disease virus, methodology comparison 6291.
airborne microorganisms, methodology comparison 7214.
bacteria, mathematical models, methodology 7258.
equipment, fermenters, fungi, mycelia 9080.
food contamination, standards 212.
methodology, activated sludge, wastewater treatment, viruses detection 6251.
methodology, bacteria contamination, carcasses 2028.
soil, methodology, effects on, acetylene reduction 7831.
velvet, wound infection, bacteria, man 5406.
- Sand**,
beaches, pollution indicators, urease activity, sewage 3180.
dunes, arylsulphohydrolase, cysteine desulphohydrolase, thiosulphate cyanide sulphurtransferase, activity, correlation, vegetation, British Isles 6955.
filters, effects on septic tanks denitrification 766.
petroleum, soil microorganisms, respiration, biomass 5916.
poliovirus adsorption 7802.
- Sandbox**,
incidence, fungi, children 1726.
- Sandwiches**,
packaging, Staphylococcus aureus growth, enterotoxins production 1091.
- Sanguinarine**,
sensitivity, Vibrio 7067.
- Sanguitritin**,
effects on gram-negative bacteria, gram-positive bacteria 8873.
- Sanitization**,
association, antibiotics administration, long-term effects 7586.
bacteria infection, intestine, man, carriers, hygiene 7208.
cholera epidemiology relationship, man 2635.
cleaning systems, beef carcasses 808.
food contamination, food industry, books 4549.
food processing, monitoring 805.
kitchens, cooking, food contamination, bacteria 213.
milk contamination, udder microflora, cattle 5339.
milking machines, detergents, cleaning systems 2632.
milking machines, milk contamination, bacteria 5341.
nosocomial environments, disinfectants aerosols 806.
surfaces, Campylobacter fetus subsp. jejuni survival, drying 807.
- 1 \rightarrow -Santonin**,
conversion, Streptomyces roseochromomycetes 2886.
- Sap**,
chemical composition, yellows, mycoplasma-like organisms, Cocos nucifera 1226.
host plants, interference biological control, bacteria, insecta 2831.
isolation, Agrobacterium tumefaciens, Vitis vinifera, pathogenicity 5744.
isolation, Mycoplasma-like organisms, yellows, Cocos nucifera 1205.
Kalanchoe, antiviral activity 3344.
phloem, collection, characterization, mycoplasma-like organisms yellows, Cocos nucifera 388.
phloem, composition, mycoplasma-like organisms yellows, Cocos nucifera 387.
plants, alfalfa mosaic virus, detection methodology 2980.
rot, wood decay, oxygen, carbon dioxide effects on 5084.
- Sap stain**,
disease control, 3-iodo-2-propynyl butyl carbamate, sodium pentachlorophenate, copper-8-quinolinate, wood storage, Liriodendron tulipifera, Pinus 9529.
- Sapenamycin**,
biosynthesis, Streptomyces canarius, biological properties, structure, physicochemical properties 1658.
- Sapogenins**,
antibacterial activity, antifungal activity 4317.
- Saponaria vaccaria**,
cactus virus X isolates characterization 5019.
dashed mosaic virus, Richardia africana, Araceae 9420.
- Saponine**,
Medicago sativa, effects on nitrogen cycle, soil microorganisms, peat 2355.

- Saprolegnia**,
nickel toxicity 1565.
- Saprophyagy**,
glycine max stems, herbicides, herbicides effects on 2380.
vesicular-arbuscular mycorrhizas, soil, relationship, organic matter 8672.
- Saprophytes**,
competition, soil pH, soil temperature, fungicides, herbicides, soil moisture.
Fusarium udum 5694.
fungi, leaf litter decomposition, *Abies alba* 6906.
levels, Brazil rivers 8066.
soil, fertilizer applications effects on, nutrient deficiency, *Pinus* 7775.
- α -Sarcin**,
N-terminus amino acid sequence, homology restrictocin, mitogillin, *Aspergillus* 114.
- Serine albidia**,
defective mutant, biodegradation, serine, production 6382.
- Sarcosine oxidase**,
FAD binding regions, amino acid sequence, *Corynebacterium* 6539.
- Sarcodinium attenuatum**,
infection, *Oryza sativa*, *Oryza glaberrima*, symptoms etiology 9366.
- Sclerodium oryzae**,
sheath rot, experimental infection, inoculation, methodology, *Oryza sativa* 1188.
- Sarubicin A**,
structure, stereochemistry 9788.
- Sarubicin B**,
streptomyces biosynthesis, antibacterial activity, gram-positive bacteria 3440.
- Sassa alba-marginea**,
extracts, antimicrobial activity 1590.
- Satellite RNA**,
cucumber mosaic virus, role, *Lycopersicon esculentum*, white leaf disease 1292.
- Satellites**,
weather, monitoring rust disease spread, Gramineae 1166.
- Saudi Arabia**,
soil microorganisms, population dynamics 2352.
- Sauerkraut**,
fermentation, lactic acid bacteria, *Leuconostoc* 5608.
- Sausages**,
coliforms food contamination, detection methodology 4819.
fermentation, spices effects on *Lactobacillus plantarum* 2056.
food contamination, *Salmonella*, isolation, media (enrichment) 4766.
nitrite inhibition *Clostridium botulinum*, growth, toxigenicity, organoleptic properties 303.
pork, *Salmonella* food contamination 179.
poultry, starter cultures, *Penicillium* 3814.
Salmonella contamination 9267.
- Savannahs**,
nitrogen cycle 2376.
nitrogen cycle 5099.
- Sawdust**,
fermentation, solid-phase methods, fungi cultures 8444.
soil amendment, effects on population dynamics *Fusarium udum* 3252.
- Scab**,
apples, cold storage effects on pathogenesis 3105.
Carya illinoensis, *Cladosporium carigenum*, effects on nuts drop 6929.
Carya illinoensis, factors affecting *Cladosporium carigenum* spores release 397.
Carya illinoensis, *Fusicladium effusum* infection, factors affecting disease spread 1202.
Citrus madurensis, isolation, Sphaceloma 1220.
Cladosporium carigenum, *Fusicladium effusum*, inoculation time effects on pathogenesis 5736.
Cladosporium carigenum, propiconazole disease control, foliar application, *Carya illinoensis* 3496.
Malus, temperature, relative humidity, effects on pathogenesis 2149.
Malus, *Venturia inaequalis* overwintering 1201.
Streptomyces scabies, disease resistance, *Raphanus sativus* 2268.
Triticum aestivum, *Fusarium graminearum*, USA, Washington 6771.
Venturia inaequalis, biological control, screening, antagonists, Chaetomium 3743.
Venturia inaequalis, *Malus pumila*, fungi biological control 5825.
Venturia inaequalis, pathogenesis, disease control, mathematical models, *Malus pumila* 5734.
Venturia pirina, disease control, urea, fenarimol, baycor, *Pyrus communis* 1395.
Xanthomonas campestris pv. *vesicatoria*, pathology, *Capsicum annuum* 8575.
- Scald**,
Alternaria porii, symptoms, *Allium cepa*, cultivars 3988.
gram-negative bacteria, *Prunus salicina*, isolation, pathogenicity, culture 1153.
Prunus salicina, bacteria, epidemiology, Brazil 1221.
Rhynchosporium oryzae, phytotoxins, phytotoxicity, pathogenicity, *Oryza sativa* 9348.
Rhynchosporium secalis, disease resistance, *Hordeum vulgare*, genetic analysis 1541.
Rhynchosporium secalis, phytotoxins binding membrane proteins, receptors, *Hordeum vulgare* 9346.
- Scandium**,
complex, enterochelin, antibacterial activity, *Escherichia coli* 1554.
- Scanning electron microscopy**,
bacteria infection, catheter 802.
books, fungi, bacteria 903.
cytology, *Uromyces viciae-fabae* infection, *Vicia faba* 5695.
histology stains, bacteria 866.
imidazoles, antifungal activity, *Candida albicans*, spheroplasts, formation 3337.
low temperature, soil microorganisms 578.
microorganisms coatings, methodology 1735.
observation techniques, air-water interface, aquatic microorganisms, isolation, ponds 8088.
optical properties, *Escherichia coli* characterization 858.
Pseudomonas tolaasii, attachment, *Agaricus bisporus*, blight 3051.
Rhizobium trifolii bacteroids, nodules, *Trifolium repens* 8676.
speck, *Lycopersicon esculentum*, pathology 2233.
use, fungicides effects on *Ustilago avenae* morphology 8619.
- Scaphytophis tritrida**,
isolation, culture, *Spiroplasma citri* 1769.
- Scenedesmus**,
bacteria, mixed culture, phosphorus removal, wastewater treatment 2615.
- Schefflera actinophylla**,
Alternaria panax infection, new records 5763.
- Schefflera arboricola**,
Alternaria panax blight, benomyl effects on 6882.
pathology, leafspot, *Alternaria* 3993.
- Schefflera digitata**,
falcariindol biosynthesis, antifungal activity, dermatophyte fung 687.
- Schiotocerca gregaria**,
role, *Colletotrichum graminicola* anthracnose, *Zea mays* 369.
- Schizaphis graminum**,
disease transmission, barley yellow dwarf virus, USA, Missouri 1164.
vectors, disease transmission, maize dwarf mosaic virus, Gramineae 5704.
vectors maize dwarf mosaic virus, disease control, oil, *Zea mays* 6843.
- Schizophyllum commune**,
antifungal activity, dihydrocarbamates 3153.
post-harvest decay, *Hevea brasiliensis* cellulose, lignins, Malaysia 7791.
protoplasts, glucans biosynthesis 1955.
pyruvic acid production 3650.
sinapyl alcohol biodegradation 162.
- Schizosaccharomyces**,
ethanol production, factors affecting 1046.
- Schizosaccharomyces pombe**,
antifungal activity, *Streptomyces leptomycin A*, *leptomycin B* 8028.
cell cycle, specificity, antimicrobial agents 690.
drug resistance, correlation, amino acids, uptake, adenosinetriphosphatase, activity 8748.
oxygen tension effects on ethanol fermentation 143.
- Schwanniomycetes aluvius**,
depression mutants, starch hydrolysis 8452.
- Schwanniomycetes castelli**,
yeasts production 2043.
- α -amylase, exo-1,4- α -D-glucosidase, pullulanase, production 3691.
- Schwanniomycetes occidentalis**,
 α -amylase, exo-1,4- α -D-glucosidase, pullulanase, production 3691.
- Sciadophytis verticillata**,
root rot, *Phytophthora cinnamomi* 5749.
- Scirrhia acicola**,
brown spot, pathology, *Pinus palustris* 6910.
- Sciarsoi**,
conversion, bacteria 3785.
conversion, pathways, bacteria 6616.
conversion, *Rhodococcus erythropolis*, plasmids association 8437.
- Sclerocystis dusail**,
identification, use, enzyme-linked immunosorbent assay 7273.
- Scleroderma**,
mycorrhizas, *Eucalyptus* 1440.
Pinus radiata, *Pseudotsuga menziesii*, New Zealand 7774.
- Sclerophthora macrospora**,
infection, *Stenotaphrum secundatum*, disease resistance 9470.
- Sclerospora graminicola**,
downy mildew, pathogenicity, genotype-environment interactions, cultivars, *Penisetum americanum* 6755.
downy mildew, pathogenicity, statistical analysis, *Penisetum americanum* 6756.
downy mildew, *Penisetum americanum*, disease control, metalaxyl seed treatments 9502.
downy mildew, *Penisetum americanum*, fungicides disease control 4116.
downy mildew, *Penisetum typhoides*, gemplasm disease resistance, productivity 473.
downy mildew, susceptibility, plant breeding, cytoplasmic male sterility, *Penisetum americanum* 5807.
downy mildew, *Zea mays*, *Sorghum vulgare*, *Penisetum typhoides*, epidemiology, reviews 1186.
heterothallicism 404.
zoospores, viability, infectivity, soil 6954.
- Sclerospora sorghi**,
downy mildew, population ecology, limiting factors, *Zea mays* 5698.
infection, *Zea mays*, downy mildew, Somalia 381.
- Sclerotia**,
Aspergillus flavus, aflatoxins, indole metabolites, association, evolution 3715.
Aspergillus parasiticus aflatoxins, *Aspergillus flavus*, *Aspergillus parasiticus* 2948.
Botrytis cinerea, isolation methodology, soil 9568.
Cenococcum geophilum, abundance, microenvironments, soil, forests 6894.
Claviceps fusiformis, pure culture, methodology 8152.
Claviceps purpurea defective mutant, ergot alkaloid biosynthesis 7506.
Claviceps purpurea, infection, *Scaevola* cereale seeds, competition, photosynthesis carbon sources 374.
formation, Carboxamides, effects on, *Sclerotium rolfsii* 4302.
formation, *Sclerotium cepivorum*, *Allium*, odor compounds, flavor compounds, induction 4001.
germination, competition, environmental stress, nutrient availability, soil 9573.
Macrophoma phaeolina, germination, nutrient availability, fungitoxins, soil 9572.
Macrophoma phaeolina, soil isolates, media (selective) 1815.
Phytophthora omnivora, antifungal activity, ammonia 696.
pigmentation, *Sclerotinia sclerotiorum*, pathogenicity, *Lactuca sativa* 6830.
quantitation, *Sclerotinia minor*, *Arachis hypogaea* blight 5680.
Sclerotinia minor, germination, soil pH, *Arachis hypogaea* leaves volatiles effects on 4807.
Sclerotinia minor, *Sclerotinia trifoliorum*, proteins, purification, characterization 8.
Sclerotinia sclerotiorum, proteins, purification, characterization 7.
Sclerotinia tuberosa, ultrastructure preservation, methodology 8161.
Sclerotium cepivorum, incidence, diallyl disulfide soil amendment effects on 151.
Sclerotium cepivorum, viability, association, drying, soil location 6972.
Sclerotium oryzae, poly(ethylene) soil mulches effects on 1513.
Sclerotium rolfsii, factors affecting, germination, *Trichoderma harzianum* antagonism, soil 9570.
Sclerotium rolfsii, methyl bromide+chloropicrin, relative humidity effects on toxicity 499.
Verticillium albo-atrum, methyl bromide+chloropicrin, relative humidity effects on toxicity 499.
- Sclerotinia**,
host plants, *Xanthium pensylvanicum*, virulence 5753.
- Sclerotinia homoeocarpa**,
resistance, iprodione, benomyl, dollar spot, *Agrostis palustris* 6010.

Sclerotinia minor

blight, *Arachis hypogaea*, fungicides disease control 4100.
 blight, chlorothalonil, disease control, *Arachis hypogaea* 3151.
 blight, disease resistance, plant breeding, *Arachis hypogaea* 1342.
 blight, Glycine max 1132.
 lettuce drop, disease control, metham sodium, *Lactuca sativa* 4002.
 sclerotia germination, soil pH, *Arachis hypogaea* leaves volatiles effects on 4937.

sclerotia, proteins, purification, characterization 8.
 sclerotia quantitation, *Arachis hypogaea* blight 5680.

Sclerotinia sclerotiorum

antifungal activity, extracts 1570.
 ascospores, infection, symptoms, Glycine max, *Phaseolus vulgaris* 9334.
 blight, Glycine max 1132.
 Caneda, *Linum usitatissimum* 7691.
 infection, *Brassica napus*, fungicides disease control, spore traps 8634.
 infection, Glycine max, disease resistance 1359.
 infection, stems, *Papaver somniferum*, effects on morphine production, distribution 6812.
 polygalacturonase, purification, characterization, role pathogenicity 946.
 sclerotia, pigmentation, pathogenicity, *Lactuca sativa* 6830.
 sclerotia, proteins, purification, characterization 7.
 stem rot, Glycine max, disease resistance, measuring techniques 6869.
 white mold, disease resistance, plant breeding, *Phaseolus* 1365.
 white mold, *Phaseolus*, USA 4940.

Sclerotinia triflorum

apothecia, development, infection, *Trifolium incarnatum* 2106.

secalin biodegradation, *Trifolium pratense* 251.
 root rot, disease resistance, *Trifolium pratense* 251.
 sclerotia, proteins, purification, characterization 8.

Sclerotinia tuberosa

sclerotia ultrastructure preservation, methodology 8161.

Sclerotium cepivorum

amino acids *Allium cepa* infection 5751.
 sclerotia formation, *Allium*, odor compounds, flavor compounds, induction 4001.
 sclerotia germination, competition, environmental stress, nutrient availability, soil 9573.
 sclerotia, incidence, diallyl disulfide soil amendment effects on 1514.
 sclerotia viability, association, drying, soil location 6972.
 white rot, *Allium*, *Bacillus subtilis*, use, biological control 6592.
 white rot, *Allium cepa*, seed treatments, biological control, *Bacillus subtilis*, fungicides 4103.
 white rot, *Allium cepa*, seeds γ -radiation effects on incidence 1426.
 white rot, *Allium*, disease control, vapam 9492.
 white rot, lipid composition, *Allium cepa* 5756.
 white rot, lipid composition, carbohydrate composition, organic acids composition, *Allium cepa* 5760.
 white rot, pathology, disease control, *Allium cepa*, reviews 1260.

Sclerotium oryzae

disease resistance, plant breeding, *Oryza sativa* 7743.
 sclerotia, poly(ethylene) soil mulches effects on 1513.
 stem rot, *Oryza*, disease resistance 9469.

Sclerotium rothii

antifungal activity, extracts 1570.
 basidiospores, role, pathogenesis, blight, *Agrostis tenuis* 9339.
 blight, disease control, fungicides, salts, *Trichoderma*, *Poa* 1402.
 blight, fumigants disease control, *Malus pumila* 492.
 Carboxamides, effects on, growth, sclerotia, formation 4302.
 cellulase assays 9158.
 fruit rot, *Lycopersicon esculentum* 6807.
 growth, mathematical models 7265.
 infection, *Agrostis palustris*, disease control, antifungal agents 1397.
 isolation, use, media (culture) + validamycin 2709.
 mixed culture, lignocellulose biodegradation 3772.
 pears, post-harvest decay, pathogenesis, amino acids, levels 1324.
 sclerotia, factors affecting, germination, *Trichoderma harzianum* antagonism, soil 9570.
 sclerotia, methyl bromide + chloropicrin, relative humidity effects on toxicity 499.
 soil-borne diseases, integrated control, *Trichoderma harzianum* bulbs treatment, soil solarization, Indocae 7768.

Scolytidae

pest attack 8651.
 pest attack, susceptibility, *Heterobasidion annosum*, *Verticilladiella*, root rot, *Pinus ponderosa* 5865.

Scolytus

vectors, microorganisms, Dutch elm disease, *Ulmus glabra* 1453.

Scopththalmus maximus

larvae, infection treatment, antibacterial agents, *Brachionus plicatilis*, food sources, aquaculture 7609.

Screening

fungicide disease control, *Erwinia amylovora*, fireblight, seedlings, *Malus pumila* 1406.
 heterotrophic microorganisms, heavy metals leaching, methodology 3256.
 hydrogenase activity, *Rhizobium japonicum* 3578.
 lignocellulose biodegradation, *Trichoderma* 3795.
 methodology, plasmids mediation β -lactamase production, *Escherichia coli* 3594.

Screening projects

bacteria proteinase, bioassays 3599.
 differentiation regulators, *Streptomyces griseus*, anthracycline antibiotics production 3602.

Scrub typhus

diagnosis, immunofluorescence, Weil-Felix test, man 9964.

Scyathium lignicola

β -D-glucosidase, purification, characterization 9156.
 β -D-glucosidase, purification, cellulase, β -D-glucosidase 6527.

Scytalium

blast, *Oryza sativa*, effects on *Pyricularia oryzae* pathogenesis 5827.

See water

antibacterial activity, *Escherichia coli*, halophilic bacteria 3318.
 antibiotic resistance, coliforms, detection 7902.
 aquatic microorganisms, fouling organisms, films, steel surfaces corrosion 1055.
 coliforms enumeration, media comparison 9956.
 coliforms, microbial pollution, sewage effluents 3481.
 continuous culture, *Candida lipolytica*, *Azotobacter vinelandii* 8089

See water, (continued)

isolation, *Vibrio mimicus* 6265.
 metals, fouling organisms, antifouling substances, antibacterial activity 151.
 steel corrosion, heterotrophic bacteria, role dissolved oxygen 9626.
 uranium, bioaccumulation *Streptomyces viridochromogenes*, immobilized cells 4256.
Vibrio parahaemolyticus isolates, identification, serotyping 3552.

Seefood

bacteria, spoilage, food contamination, packaging 2935.
 carbon dioxide storage conditions effects on spoilage 2921.
 contamination, *Salmonella matopuri*, *Salmonella cenro* 188.
 Enterobacteriaceae, histamine production, media (culture) 2574.
 food contamination, *Staphylococcus aureus*, food processing hygiene 3858.
 food contamination, viruses, bacteria 8466.
 growth, effects on, *Clostridium botulinum*, toxicity toxicity 309.
 indicator species 6671.
 Limulus lysate test, endotoxins levels 2956.
 microbial contamination, *Salmonella enteritidis* 2911.
 preservatives, EDTA, lysozyme 2934.
 quality control, resazurin test, food contamination, bacteria 3374.
 spoilage, bacteria, chlorotetracycline + sodium chloride treatment effects on 2922.
 spoilage, bacteria, detection, ethanol levels 8458.
 spoilage, proteolytic bacteria 3825.
 storage effects on bacteria, *Crassostrea virginica*, *Mercenaria campechiensis* 4765.
Vibrio cholerae food contamination, toxicity man 1070.
Vibrio parahaemolyticus isolation 2051.
Vibrio parahaemolyticus, media (selective), polymyxin B loss 222.

Seasonal variations

actinomycetes, nitrogen fixation, nodules, *Ceanothus velutinus* 9513.
 aerobic bacteria levels, Fagus forests soil horizons 524.
 bacteria distribution, lakes, Italy 7203.
 effects on microorganisms biodegradation pollutants, aquatic environment 2876.
 fungi biomass, *Pinus*, forests 515.
 mycorrhizas, nutrient status, Gramineae 1490.
 mycorrhizas, roots colonization, *Trifolium repens* 554.
 nitrifying bacteria, ammonifying bacteria, association, *Fagus forests*, soil nitrogen mineralization 4137.
Pseudocercospora herpotrichoides infection, *Hordeum*, epidemiology 1150.
Pseudomonas syringae pv. *papaialis* susceptibility, *Malus pumila* 400.
 respiration, soil properties, grasslands, tropical environment 5611.
 Rhizocytia solani, isolation, plants, soil 2097.
 sakuraiella antifungal activity, *Ribes nigrum* leaves, *Botrytis cinerea* infection 1332.

Secale cereale

benomyl, soil fungistasis 5836.
 rhabdovirus infection 2118.
 seeds, infection, *Claviceps purpurea* sclerotia, competition, photosynthesis carbon sources 374.

Secalonic acid D

contamination, corn dust 279.

Secondary alcohols

biosynthesis, *Bacillus subtilis* var. *niger* 3755.

Secondary metabolism

fungi, metabolites, books 3637.
 microorganisms, antibiotics, extracellular enzymes, books 3636.

Secretin

biosynthesis, genetic engineering, *Escherichia coli* 1970.

Sedimentation

activated sludge, effects on waste treatment 1703.
 fermenters, biomass production, reviews 8083.

Sediments

aquatic environment, oxalic acid, biodegradation, bacteria 7543.
 aromatic compounds, digestion (anaerobic) 4760.
 collection, methodology, detection, viruses, marine environment 2655.
 estuaries, aromatic compounds, hydrocarbons, metabolism, microorganisms 5145.
 estuaries, bacteria biomass, muramic acid indicators, gas chromatography 9027.
 estuaries, enteritis viruses, isolation methodology 8106.
 extraction, spores, *Clostridium perfringens*, methodology 1771.
 ground water, microorganisms biomass detection methodology, association, glycerol assays 4466.
 harbors, Enterobacteriaceae, antibiotic resistance, heavy metals resistance 9645.
 hydrocarbons biodegradation, oil installations, marine environment 2392.
 lakes, bacteria, dehalogenation, halogenated aromatic compounds 6648.
 lakes, bacteria, factors affecting methanogenesis 624.
 lakes, fatty acid composition, organic compounds biodegradation, bacteria 7553.
 marine environment, bacteria biomass measuring techniques, muramic acid, high-performance liquid chromatography 7252.
 marine environment, *Vibrio parahaemolyticus* isolation 2051.
 microbial pollution, indicator species, coastal waters 8085.
 rhizosphere, nitrogen fixation, sulfate-reducing bacteria, *Zostera marina* 2356.
 rivers, isolates, bacteria, PCB biodegradation 8421.
 sewage outfalls, water pollution, enterovirus, *Streptococcus*, coliforms 796.
 soil, relationship, microorganisms membranes lipids 5104.
 streams, wood decomposition, bacteria 2885.
 USA, Washington, microbial pollution 2627.
 yeasts volume association, measuring techniques 9089.

Seed crops

Brassica, incidence, *Alternaria*, *Leptosphaeria maculans*, British Isles, surveys 4042.

Seed germination

Cajanus cajan, *Aspergillus* effects on 7796.
 fungal flora inhibition, seed-borne diseases, *Cedrus deodara* 9528.

Seed rot

role production, pectin lyase, pectate lyase, *Phoma exigua*, *Vigna radiata* 7413.
 seed treatments, fungicides, *Gossypium* 1432.

Seed treatment

captan, *Lolium perenne* yield 5847.

Seed treatments

adhesives, *Rhizobium meliloti* inoculation, *Medicago sativa* 8681.
 Agrobacterium rhizobacter Polysaccharides, inhibition damping-off, *Pythium ultimum*, stimulation growth, *Beta vulgaris* 7710.
Allium cepa, white rot, biological control, *Bacillus subtilis* + fungicides 4103.
Arachis hypogaea, fungicides, association, disease control 2291.
Azotobacter chroococcum, nitrogen fixation, effects on yield, *Cyperus rotundus* 8677.

Seed treatments, (continued)

- Bacillus subtilis*, disease control, white rot, *Allium cepa* 5448.
disease control, *Pseudomonas syringae* pv. *lachrymans* leafspot, *Cucumis sativus* 9501.
disease control, *Septoria nodorum* glume blotch, *Triticum aestivum* 9466.
effects on, *Drechslera graminea*, disease spread, leaf stripe, *Hordeum vulgare* 1425.
Enterobacter cloacae, biological control, *Pythium* rot, *Beta vulgaris*, *Cucumis sativus*, *Pisum sativum* 9481.
fungi plant diseases, *Glycine max*, Gramineae, fungicides, reviews 4132.
fungicides, damping-off, seed rot, *Gossypium* 1432.
fungicides, disease control, *Glycine max* 1428.
fungicides, disease control, root rot, *Glycine max*, USA, Ohio 7772.
fungicides, disease control, *Tilletia controversa* bunt, *Triticum aestivum* 4110.
fungicides, disease control, tobacco mosaic virus, *Crotalaria juncea* 1436.
fungicides, *Dolichos lablab* 2290.
fungicides effects on *Glycine* max 5844.
heat treatments, *Fusarium moniliforme* infection, corn 5845.
Hordeum, fungicides, disease control, *Colliobolus sativus* infection 1429.
Hordeum vulgare, *Triticum aestivum*, use, phenylmercuric acetate, effects on *Fusarium nivale* infection 8645.
leaf stripe, *Pyrenophora graminea*, *Hordeum vulgare* 1435.
metalaxyl, disease control, downy mildew, *Oryza sativa* 1433.
metalaxyl, *Pennisetum americanum*, disease control, *Sclerospora graminicola* downy mildew 9502.
Oryza sativa, use, phytoalexins inducers, induction, hypersensitive response, disease resistance, *Drechslera oryzae* infection 2292.
Pseudomonas, disease control, *Gaeumannomyces graminis*, take-all, *Triticum aestivum* 3158.
trifluoromethyl, *Gaeumannomyces graminis* var. *tritici*, take-all, *Triticum aestivum* 5067.
triphenyltin chloride, *Xanthomonas oryzae*, *Oryza sativa* 2293.
Triticum aestivum, disease control, loose smut, *Ustilago* 1431.
Triticum aestivum, relationship calcium peroxide antimicrobial activity 7773.
- Seed-borne diseases**
bean pod mottle virus infection, *Glycine max*, epidemiology 2984.
diaporth phaseolorum var. *sojae*, relationship, symptoms, *Glycine max*, seeds 1143.
effects on, *Zea mays*, yield, *Fusarium moniliforme* 1180.
fungal flora, inhibition seed germination, *Cedrus deodara* 9528.
fungi infection, *Vigna radiata*, biodegradation 3915.
fungi infection, *Oryza sativa*, *Glycine max*, *Triticum aestivum* 1434.
Fusarium nivale, pathology, *Triticum aestivum*, seedlings 3937.
isolation, *Xanthomonas campestris* pv. *vignicola*, *Vigna unguiculata* 4944.
maize chlorotic mottle virus, Gramineae, *Zea mays* 4949.
Peronospora effusa, downy mildew, *Spinacia oleracea* 9423.
Pisum sativum, detection, *Mycosphaerella pinodes*, *Macrophomina phaseolina*, *Phoma medicaginis* var. *nodulifera*, *Fusarium oxysporum* 6732.
plants pathogens, quality control assays 2968.
Pseudomonas syringae pv. *tagetes*, leafspot, *Helianthus annuus* 1303.
rot, *Macrophomina phaseolina*, pathology, *Sesamum indicum* 5022.
Septoria nodorum, detection, fluorescence, *Triticum aestivum* 1190.
soybean mosaic virus, radioimmunoassay, *Glycine max* 1316.
Verticillium albo-atrum, detection, *Medicago sativa*, seeds 3918.
viruses, enzyme-linked immunosorbent assay 7219.
viruses, fungi, bacteria, pathogenesis 2973.
viruses infection gemplasm, surveys 2092.
Xanthomonas campestris pv. *phaseoli*, detection, immunofluorescence, *Phaseolus vulgaris* 5800.
- Seed-borne fungi**
fungicides, antifungal activity, trees 2319.
infection, *Cajanus cajan*, isolation, identification 7650.
- Seedling blight**
Alternaria cassiae, weed control, *Cassia obtusifolia*, *Cassia occidentalis*, *Crotalaria spectabilis* 1286.
Brassica actinophylla, *Pythium splendens*, etiology, disease control, USA, Hawaii 4996.
Fusarium graminearum, disease resistance, *Triticum aestivum* 4072.
Septoria nodorum, pathology, *Hordeum vulgare* 6767.
- Seedlings**
Abies fraseri, bioassays, *Pythophthora cinnamomi*, soil 324.
Aces pseudotilaeus, endomycorrhizas effects on growth 531.
Arachis hypogaea, growth, nodulation, *Cercospora arachidicola* leafspot effects on 341.
Brassica, *Pythium aphanidermatum* damping-off, new records, Singapore 1259.
Citrus jambhiri, wilt, *Pierce's* disease bacteria 392.
Citrus lemon, root rot, *Pythophthora nicotianae* var. *parasitica*, fungicides disease control 484.
coal mines, inoculation, *Rhizobium*+fertilizers slurries 8691.
Coffea arabica, disease resistance mechanisms, *Colletotrichum coffeanum* 479.
Coffea, *Phoma costaricensis*, dieback 7682.
Cucurbitaceae, disease resistance, *Pythophthora drechsleri* 1364.
Eucalyptus st-johnii, mycorrhizas development 4208.
exudates, *Cicer arietinum*, disease resistance, damping-off, root rot, *Rhizoctonia bataticola* 7755.
fungicides, *Rhizoctonia solani* infection, *Helianthus annuus* seedlings 6870.
Gossypium, diseases, bacteria, fungi, disease control 2225.
Gossypium hirsutum, soil-borne diseases, *Pythium* 1266.
Glycine, soil properties 522.
growth, *Sophora secundiflora*, mycorrhizas effects on 583.
Helianthus annuus, *Rhizoctonia solani* infection, disease control, fungicides 6870.
Lycopersicon esculentum, roots, infection, verticillium albo-atrum, *Fusarium oxysporum* f.sp. *lycopersici*, pathogenesis 4028.
Lycopersicon esculentum, screening, plant breeding, disease resistance, *Verticillium dahliae* wilt 5045.
Makus pumila, fireblight, *Erwinia amylovora*, screening fungicides, disease control 1406.
mycorrhizas inoculation, trees 5857.
Oryza sativa, *Rhizoctonia solani* infection, soil moisture effects on 4965.
Picea sitchensis, toxicity, *lomannoxin*, *Fomes annosus* 6914.
Pinus ponderosa, *Pseudotsuga menziesii*, *Laccaria laccata* inoculation, fertilizer applications 5852.
Pinus radiata, *Diplodia pinea* infection, relationship, temperature, condensation 7786.
Pinus radiata, susceptibility, *Diplodia pinea* infection 7787.
plants, greenhouses, *Pythium* infection, damping-off 1265.

Seedlings, (continued)

- Pseudotsuga menziesii*, growth, survival, inoculation, mycorrhizas 518.
Pseudotsuga menziesii, *Fusarium roseum* stem rot 5875.
Quercus, *Cronartium quercum* f.sp. *fusiforme* rust, ascospores inoculum 544.
Quercus velutina, water relations, water potential, ectomycorrhizas, *Pisolithus tinctorius* 9508.
roots respiration, *Pythophthora cinnamomi* infection, plants 5668.
roots, *Sorghum bicolor*, carbon compounds exudates, nitrogen-fixing bacteria inoculation 4243.
Sorghum bicolor, susceptibility, maize dwarf mosaic virus 6747.
Sorghum vulgare, roots, cytology, mitosis, *Pariconia circinata* phytotoxins effects on 3344.
Theobroma cacao, pathogenicity, *Pythophthora* 3966.
trees, phosphate uptake, vesicular-arbuscular mycorrhizas 9503.
trees, root rot, *Pythophthora cinnamomi* 1463.
Triticum aestivum, pathology, seed-borne diseases, *Fusarium nivale* 3937.
Triticum aestivum, root rot, *Fusarium graminearum*, nitrapyrin disease control 4109.
Triticum, *Fusarium culmorum* infection, water potential effects on pathogenicity 1149.
Tsuga heterophylla, *Geococcium geophilum* mycorrhizas formation, USA, Oregon 6912.
Tsuga heterophylla, plant diseases, *Colletotrichum acutatum*, new records, Canada 7783.
Zea mays, disease resistance, blight, ear rot, *Fusarium graminearum* 1361.
Zea mays, etiolation, host-parasite interactions, susceptibility.
Helminthosporium maydis, *Helminthosporium carbonum* 3015.
Zea mays, *Peronosclerospora sorghi*, oospores, infection, inoculum, methodology 9551.
- Seeds**
Allium cepa, γ -radiation effects on white rot incidence 1426.
Arachis hypogaea, *Aspergillus parasiticus*, *Aspergillus oryzae*, spoilage 3802.
Arachis hypogaea, *Rhizobium inoculation*, nodulation, nitrogen fixation 9591.
Brassica oleracea, *Alternaria brassicicola* infection, epidemiology 1229.
Brassica oleracea, leafspot, disease control, iprodione 508.
Brassica, surfaces, bacteria, factors affecting 4793.
coats, *Helianthus annuus*, autohydrolysis-explosion pretreatment, effects on *Trichoderma reesei* cellulase hydrolysis 9136.
color, relationship, lesions, *Septoria glycines* brown spot, *Glycine max* 5684.
Cosmos sulphureus, storage conditions effects on fungal flora 4048.
Crotalaria juncea, *Macrophomina phaseolina* infection, pathogenesis 1272.
Cucurbita, germination inhibition, bacteria activity 8577.
deteneration, fungi, association, *Insecta* 2975.
Eucalyptus, fungal flora, characterization 3103.
Festuca arundinacea, infection, *Acremonium coenophialum*, detection methodology 9077.
fungal flora, *Compositae* 7726.
fungal flora, *Elletaria cardamum* 7725.
germination, exudates, carbon sources, bacteria soil 551.
germination, *Glycine max*, *Cercospora kikuchi* effects on 4939.
germination, *Zea mays*, *Gossypium hirsutum*, *Triticum aestivum*, *Azotobacter chroococcum* stimulation 3194.
Glycine max, detection soybean mosaic virus, solid phase methods, radioimmunoassay 5368.
Glycine max, fungi, mycelia, penetration, pores 321.
Glycine max, microflora, *Azotobacter*+ foliar applications effects on 5671.
Glycine max, *Phomopsis infection*, relationship, weather, USA, Kentucky 6734.
Glycine max, soybean mosaic virus infection, detection, enzyme-linked immunosorbent assay 343.
Glycine max, symptoms, relationship, seed-borne diseases, *Diaporthe phaseolorum* var. *sojae* 1143.
Gossypium hirsutum, ammoniation, effects on cow's milk aflatoxin M1, cattle feeding regimes 2945.
Gossypium hirsutum, *Fusarium oxysporum* f.sp. *asvifectum* wilt, pathogenesis 4991.
Gossypium hirsutum, protection, fungi infection 5068.
Guzmania abyssinica, germination, phytotoxins inhibition, fungi 2082.
Hordeum vulgare, heat treatments, disease control, *Pyrenophora graminea*, *Pyrenophora teres*, infection 1430.
inoculation, *Azotobacter chroococcum*, nitrogen fixation, *Zea mays* 4233.
Lactuca sativa, lettuce mosaic virus detection, enzyme-linked immunosorbent assay, USA, Florida 5017.
Lactuca sativa, radioimmunosorbent test detection lettuce mosaic virus 1754.
Leguminosae, inoculation, *Rhizobium japonicum*, *Rhizobium phaseoli*, survival, liquid culture 1786.
Leguminosae, *Rhizobium inoculation*, problems, Israel 5945.
Leguminosae, +*Rhizobium*, survival, inoculum methodology effects on 1510.
Linum usitatissimum, calories content, *Aspergillus niger*, *Fusarium oxysporum* effects on 7722.
Lupinus angustulus, phomopsis leptostromiformis, infection, detection, methodology 1811.
Lycopersicon esculentum, *Pseudomonas syringae* pv. *tomato* infection, survival 412.
Lycopersicon esculentum, tobacco mosaic virus infection 2184.
Medicago sativa, detection, *Verticillium albo-atrum*, seed-borne diseases 3918.
microflora, *Capicum annuum*, fungicides effects on 5832.
Microrhiza macrophylla, fermentation, bacteria 6675.
Phaseolus mungo, germination, fungi effects on 3924.
Phaseolus vulgaris, survival, *Rhizobium phaseoli*, coal inoculum effects on 3159.
Picea sitchensis, *Caloscypha fulgens* penetration, pathogenesis 3174.
Pinus taeda, pitch canker pathogenology 543.
Piper nigrum, *Xanthomonas campestris*, infection, survival 412.
Pisum sativum, *Pseudomonas antagonism*, *Trichoderma hamatum*, association, *Pythium* rot, biological control 5820.
plants, *Azotobacter chroococcum* inoculation, effects on yield 7800.
production, *Pinus contorta* subsp. *latifolia*, blister rust effects on 4169.
Secale cereale, infection, *Claviceps purpurea* sclerotia, competition, photosynthesis carbon sources 374.
Sesamum indicum, post-harvest decay, *Aspergillus niger*, *Alternaria alternata*, proteins levels 7117.
Triticum aestivum, fungi infection, relationship germination 8600.
Triticum, sterilization, methodology, *Gaeumannomyces* 5846.
viability, association, fungicides prevention fungi post-harvest decay, corn 5029.
Vigna catjang, germination, fungi spoilage effects on 3919.
Vigna radiata, *Aspergillus infection*, storage conditions effects on 2111.
Vigna radiata, inoculation, *Rhizobium*, survivability 1498.
Vigna unguiculata, isolation, *Xanthomonas campestris* pv. *vignicola* 4944.
yield, *Glycine max*, tillage effects on 5130.

Seeds, (continued)

- yield, *Lespedeza cuneata*, association, Rhizoctonia blight 6745.
 yield, photosynthesis, relationship nitrogen fixation, *Glycine max* 6984.
- Seiridium cardinale**,
 canker, pathology, *Cupressus sempervirens* var. *stricta*, *Cupressus sempervirens* var. *horizontalis* 5869.
- Selection**,
Gnomonia leptostyla anthracnose disease resistance, *Juglans nigra* 5874.
- Selenazole**,
 antiviral activity 8797.
- L-Selenocysteine**,
 enzymatic synthesis, *Escherichia coli* tryptophan synthase use 9127.
- Selenomethionine**,
 identification, acetyl-CoA acetyltransferase, *Clostridium kluyveri* 88.
- Selenomethionine**,
 radioactive labelling, viruses proteins, methodology 1761.
- Self-association**,
 exo-1,3- β -D-glucanase, *Saccharomyces cerevisiae*, *Candida utilis*, *Geotrichum lactis*, *Kluyveromyces fragilis* 44.
- Semen**,
 cryopreservation media, contamination, antimicrobial activity, nipagin 1591.
Susscrofa, bacteria, antibacterial activity, antibiotics 715.
- Semiarid environments**,
 waste disposal, oil, biodegradation, soil properties, revegetation 7020.
- Semilki Forest virus**,
 core protein, amino acid sequence 792.
 polyribonucleotides antiviral activity, chick embryos 1578.
- Senecio jacobaea**,
 association *Hydrangea macrophylla*, tomato spotted wilt virus detection 5016.
- Senecence**,
 Gramineae, *Erysiphe graminis* powdery mildew, shading, effects on 3956.
Poa pratensis leaves, *Drechslera sorokiniana* leafspot, herbicides effects on pathogenesis 9387.
- Separation techniques**,
 chromatography, immunoglobulin M, man, hepatitis A 1755.
 flotation, *Hansenula polymorpha* cells 6349.
 neomycin sulfate, USS, Anion exchange resin 2559.
 penicillins, thin-layer chromatography 2549.
 rifampicin, mixtures 1629.
 vireonin components, characterization, antibacterial activity 779.
 viruses DNA 1739.
- Sephrose**,
Streptococcus lactis immobilization 6317.
- Sepsis**,
 isolates, aerobic bacteria, antibiotics resistance 8729.
Streptococcus, occupational exposure, meat industry, hygiene, man 2634.
- Septa**,
 peptidoglycans, biosynthesis, role, methicillin, antibiotic resistance, *Staphylococcus aureus* 5148.
- Septic tanks**,
 denitrification, sand filters effects on 786.
 soils (sandy), survival, *Salmonella adelaide*, coliforms 1693.
- Septicemia**,
 man, bacteria, antibiotic resistance 645.
- Septoria**,
 amino acids, amidination, antifungal activity 2478.
 infection, *Triticum aestivum*, yield 9369.
 plant diseases, *Triticum*, disease control, fungicides 5830.
 speckled leaf blotch, *Triticum aestivum*, incidence, distribution, USA, California 1171.
- Septoria apii**,
 antifungal activity, pyrazoles derivatives 6875.
- Septoria apicola**,
 leafspot fungicides disease control 4098.
- Septoria glycines**,
 brown spot, effects on, *Glycine max*, yield 5678.
 brown spot, *Glycine max*, lesions, relationship seeds color 5684.
 brown spot, temperature, dew, effects on, pathogenesis, *Glycine max* 2105.
 disease control, benomyl foliar applications, metham fumigation, *Glycine max* 5060.
- Septoria helianthi**,
 leafspot, *Helianthus annuus*, new records, Pakistan 7697.
 leafspot, incidence, identification, *Helianthus annuus*, Turkey 9438.
- Septoria lycopersici**,
 fruit rot, *Lycopersicon esculentum* 6807.
 leafspot, disease control, plant breeding, *Lycopersicon esculentum* 5048.
- Septoria molleriana**,
 leafspot, *Canavalia kauensis* 4990.
- Septoria nodorum**,
 disease resistance, *Triticum aestivum*, seasonal variation 6781.
 glume blotch, association *Stilpoidia mosellana*, *Triticum* 1167.
 glume blotch, disease resistance, plant breeding, *Triticum aestivum* 3123.
 glume blotch, latent infection, *Triticum aestivum* 6752.
 glume blotch, leafspot, *Hordeum pusillum*, symptoms, isolation, characterization, infectivity 6751.
 glume blotch, pathogenicity, *Triticum aestivum*, *Hordeum vulgare* 3021.
 glume blotch, symptoms, *Triticum aestivum* 3950.
 glume blotch, *Triticum aestivum*, disease control, crop rotation, seed treatments 3446.
 infection, *Triticum aestivum*, disease resistance, genetic analysis 4058.
 leaf rust, disease control, triazabutyl, *Triticum aestivum* 506.
 seed-borne diseases, detection, fluorescence, *Triticum aestivum* 1190.
 seedling blight, pathology, *Hordeum vulgare* 6767.
 septorine, structure 7444.
 spore germination, pathogenicity, host range, *Triticum aestivum*, *Hordeum vulgare* 3019.
- Septoria pulcherrima**,
 leafspot, *Eucalyptus*, New Zealand 7706.
- Septoria pulcherrima sp. nov.**,
 characterization, association *Eucalyptus* leafspot 5085.
- Septoria tritici**,
 leaf blotch, disease resistance, plant breeding, height, *Triticum aestivum* 454.
- Septoria tritici**,
 infection, disease resistance, *Triticum* 8620.
 infection, *Triticum*, leaves necrosis, yield reduction 9368.

- Septoria veronicae**,
 leafspot, pathogenicity, Hebe 5757.
- Septorine**,
Septoria nodorum, structure 7444.
- Serine**,
 production, methylotrophic bacteria 3660.
 production, *Sarcina albidia*, defective mutant, biodegradation 6382.
- L-Serine**,
 production, *Escherichia coli* immobilized cells 9126.
- Serine carboxypeptidase**,
Pseudomonas sanguineus, purification, characterization 6503.
- Serine proteinase**,
Bacillus subtilis, purification, characterization 7416.
 biosynthesis, *Bacillus brevis*, sporulation 6545.
 Conidiobolus, biosynthesis, activity, characterization 8304.
Escherichia coli, purification, characterization 3679.
 Halobacterium halobium, purification, characterization 7393.
 intracellular, *Bacillus brevis*, association, sporulation, purification, characterization, 36.
 isolation, characterization, *Bacillus brevis* 8281.
 purification, characterization, *Bacillus licheniformis* 6490.
 purification, characterization, *Trichoderma lignorum*, *Trichoderma koningii* 20.
 Thermoactinomyces vulgaris, active sites, structure-activity relationships 3665.
- Seroepidemiology**,
 use enzyme-linked immunosorbent assay, hepatitis B surface antigen, antigen-antibody complexes, man 822.
- Serological tests**,
 edema diagnosis, *Escherichia coli* neurotoxins 3885.
 methodology, *Streptococcus* classification 9886.
 reagents, quality control, contamination, bacteria, viruses 5229.
- Serotonin**,
Pichia guilliermondii, effects on radioresistance 7025.
- Serotyping**,
 Chlamydia psittaci, sheep isolates, immunofluorescence 875.
 Chromatoplasma kosen 7903.
 Erysipelothrix rhusiopathiae 6329.
 Erysipelothrix rhusiopathiae 6330.
 herpes simplex virus, enzyme-linked immunosorbent assay 9853.
 rotavirus, enzyme-linked immunosorbent assay 1743.
 Shigella dysenteriae, Shigella boydii, use, agglutination 5405.
 Staphylococcus aureus, antisera, media (culture) effects on 881.
 Streptococcus group D 7253.
 Streptococcus group G, Nigeria 1773.
 tobamovirus, infection, Capsicum 4032.
 Vibrio parahaemolyticus, identification, sea water isolates 3552.
- Serpula lacrimans**,
 chemotropism, association, wood volatiles 3765.
 dry rot, wood 3172.
- Serratia**,
 aminoglycoside antibiotics, antibiotic sensitivity testing 4351.
 antibacterial activity, β -lactam antibiotics 4340.
 antibacterial activity, cefeprozime 7146.
 antibacterial activity, cephalosporins 4341.
 antibacterial activity, norfloxacin 7062.
 antibacterial activity, piperacillin 9757.
 aztreonam antibacterial activity 777.
 cefotetan antibacterial activity 5198.
 cefotetan antibacterial activity 7138.
 cefotetan antibacterial activity comparison 6134.
 clinical isolates, antibacterial activity, azlocillin 8847.
 norfloxacin antibacterial activity 2440.
 symbiosis, algae, photosynthesis, starch biosynthesis 3708.
 urinary tract clinical isolates, norfloxacin antibacterial activity 9671.
 urinary tract isolates, antibiotics sensitivity 8813.
- Serratia killensis**,
 hydrocarbons degradation, amino acids production 8195.
- Serratia marcescens**,
 antibacterial activity, Chromobacterium violaceum antibiotic Y-T0678H 9768.
 M.K. 0366 antibacterial activity 6055.
 antibacterial activity, cefixime 2528.
 antibacterial activity, fosfomicin 7184.
 antibacterial activity, netilmicin, tobramycin, amikacin, gentamicin 4384.
 antibacterial activity, O-demethylfortimicin 4413.
 antibacterial activity, temocillin 5254.
 antibacterial activity, thenamycin derivatives 3442.
 antibiotic resistance, aminoglycoside antibiotics, incidence, Switzerland, clinical surveys 6003.
 antibiotic SM-1652 antibacterial activity 3398.
 antibiotic synergism, antibiotic antagonism, cefotaxime, 3-desacetylcefotaxime 6118.
 antibiotic T-1982 antibacterial activity 735.
 bacteriocin typing methodology 9895.
 chitinase, purification 2784.
 colonial characteristics association, antibiotic resistance 4283.
 crown rot, Medicago sativa, USA, Utah 9322.
 drug resistance, chlorhexidine 1525.
 endonuclease activity, growth, sodium dodecylbenzene sulfonate, propanol, effects on 2460.
 factumycin antibacterial activity 3436.
 N-formimidoyl thenamycin, antibacterial activity 3430.
 N-formimidoyl thenamycin, cefotaxime, antagonism cephalosporins, β -lactamase induction 7059.
 lactic acid biosynthesis 8206.
 meclizine: β -lactam antibiotics antibacterial activity 3314.
 phages, monitoring, sewage treatment 3462.
 promidic acid antibacterial activity 1556.
 O-specific polysaccharides, structure 4702.
 sulfonamide susceptibility, association, cotrimoxazole drug resistance 6004.
 temocillin antibacterial activity 8155.
 thiacycline antibacterial activity, comparison, tetracycline, doxycycline, minocycline 1637.
 threonine biosynthesis 4580.
- Serum**,
 aminopeptidase, assays, man, use leucine dehydrogenase, sphaericus, *Bacillus megaterium* 6308.
 aztreonam assays, high-pressure liquid chromatography 7167.

Serum, (continued)

- bactericidal activity, gram-negative bacteria, reviews 4295.
- bactericidal activity, mice, binding, *Salmonella* lipopolysaccharides antigenic determinants 2452.
- man, antifungal agents quantification, high-performance liquid chromatography 5438.
- man, erythromycin binding, relationship antibacterial activity 2562.
- pigs, pseudorabies virus antibodies, detection, immunodiffusion 5374.

Serum bactericidal activity,

- amikacin \pm ceftazidime, cefoperazone \pm amikacin, *Pseudomonas aeruginosa*, *Klebsiella pneumoniae* 3400.

Sesamum indicum,

- pathology, rot, *Macrophomina phaseolina*, seed-borne diseases 5022.
- seeds, post-harvest decay, *Aspergillus niger*, *Alternaria alternata*, proteins levels 7717.

- Synchytrium canker, pathogenesis, ultrastructure 9439.

Sesbania rhizobium,

- nicotinic acid nutrient requirements 9577.

Sesbania rostrata,

- manure, effects on nitrogen fixation, *Oryza sativa* 4240.

Sesquicillium candelabrum,

- infection, *Pseudotsuga menziesii* roots, incidence 4162.

Sesquiterpenes,

- infection, *Alternaria solani* alternate acid, *Solanum tuberosum* tubers 5051
- lactones, *Helianthus annuus*, antimicrobial activity 7953.
- Leninus lepidus* 4259.
- structure, *Aspergillus oryzae* 8382.
- Wauburgia, antifungal activity, *Saccharomyces cerevisiae* 8791.

Sesquiterpenoids,

- 4 α -hydroxydihydroilludol, structure, *Citrocybe illudens* 3729.
- hypersensitive response, *Phytophthora infestans*, tubers, *Solanum tuberosum* 3089.

Setaria geniculata,

- blight, *Beniowskia sphearvoides*, pathology 1184.

Setaria italica,

- life cycle, association *Azospirillum brasilense* nitrogen fixation 8702.

Setaria viridis,

- rhabdovirus infection 2118.

Sewage,

- aromatic compounds mineralization, bacteria 2008.
- bacteria, N-methyl-2-pyrrolidone biodegradation 2017.
- beaches, pollution indicators, urease activity 3180.
- contamination, public health, man 5285.
- effects on, microbial pollution, bacteria, rivers 6264.
- fungi analysis, Mexico 8953.
- isolation, enterovirus, immunoelectron microscopy 3468.
- mercury concentration, relationship, activated sludge, bacteria activity 8943.
- nitroaromatic compounds, transformation, microorganisms 5288.
- organic compounds mineralization, bacteria 2012.
- oxidation, nitrifying bacteria 5327.
- poliovirus incidence, Czechoslovakia 3460.
- purification, bacteria activity 8962.
- Salmonella*, antibiotic resistance, incidence 6016.
- Salmonella* isolation, media (enrichment) companion 2675.
- viruses levels, measuring technique 5373.
- viruses recovery, surface charge, filters 8096.
- waste disposal sites, fecal coliforms, ground water movement 9814.

Sewage effluents,

- coliforms, isolates, antibiotic resistance, transfer, *Escherichia coli* 636.
- coliforms, microbial pollution, sea water 3481.
- lagoons, anaerobic conditions, *Thiopedia rosea* flocculation 8064.
- microbial pollution, pollution levels 1712.
- nitrotriacetic acid, marine pollution, biodegradation, marine microorganisms, bacteria 5323.
- pollution monitoring, biological oxygen demand, algae 2614.
- waste disposal, estuaries, effects on viruses levels 1704.

Sewage effluents,

- microbial pollution, indicator species, coliforms 3482.

Sewage effluents,

- sediments, water pollution, enterovirus, *Streptococcus*, coliforms 796.

Sewage sludge,

- aerobic digestion, nitrification, denitrification 5302.
- ATP levels, measuring techniques, use, *Photinus luciferin* 4-monooxygenase (ATP-hydrolysing) bioluminescence 7194.
- bacteria, biodegradation, phenol 8941.
- composting, aeration 8937.
- composting, pathogens reduction 8938.
- composting, thermophilic microorganisms 6253.
- composts, thermophilic bacteria, distribution, actinomycetes 5312.
- digestion (aerobic), thermophilic bacteria 4431.
- digestion (anaerobic), metals, chelates, nutrient availability 8947.
- digestion (anaerobic), methanogenesis 8934.
- digestion (anaerobic), nutrient requirements, metals 8946.
- digestion (anaerobic), wastewater treatment 8055.
- disinfection, electrons, radiation 8927.
- disinfection, pathogens 8936.
- disinfection, pathogens reduction, γ radiation 8935.
- effects on, soil properties, books, conferences 8188.
- enterovirus, poliovirus, relationship vaccination, man 3470.
- feeding regimes, cattle, microorganisms, food contamination, meat 4803.
- isolation, bacteria, pathogens 6248.
- isolation, *Yersinia enterocolitica* 8945.
- land disposal, salinity effects on decomposition, nitrogen mineralization 8955.
- methanogenic bacteria, coenzyme F420 assays, high-performance liquid chromatography, fluorescence 9021.
- pathogens, disinfection, conferences 9096.
- RNA phages, coliforms, typing, Africa 6269.
- Salmonella* isolation 3461.
- soil amendment, effects on soil microorganisms, growth 5988.
- soil amendment, *Leguminosae* *Rhizobium japonicum* survival association 7832.
- thermophilic bacteria biomass, digestion (aerobic) 8931.
- thermophilic bacteria, heavy metals toxicity, digestion (anaerobic) 8063.
- toxicity, animal models, man 3489.
- viruses, bacteria, public health, man 7192.
- viruses, cytotoxicity, reduction, wastewater treatment 8950.
- waste treatment, digestion (aerobic), thermophilic microorganisms 8939.

Sewage treatment,

- activated sludge, microorganisms distribution 787.

Sewage treatment, (continued)

- anaerobic bacteria, digestion (anaerobic), association, temperature 5289.
- lims, activated sludge, microorganisms distribution, models 8948.
- lims, activated sludge, models 8949.
- methanogenic bacteria, methylotrophic bacteria, technology, books 5450.
- monitoring, *Serratia marcescens* phases 3462.
- reactors, methane biosynthesis, bacteria 4435.
- urbanization, effects on, antibiotic resistance, coliforms 7879.

Sewage treatment plants,

- contamination, *Salmonella*, occupational hazards 1730.
- pollution monitoring, *Spirillum volutans* 3464.

Sewers,

- concrete walls corrosion, *Thiobacillus* enumeration, Germany, Fed. Rep. 7537.
- Salmonella* isolation, incidence, British Isles 1075.

Sex differences,

- Grammella nigrifrons* vectors, maize chlorotic dwarf virus stunt, Zea may 5697.

Sex hormones,

- Phytophthora parasitica*, production, isolation, characterization 6566.
- Tremella mesenterica*, tremogeron A-10, tremogeron A-13, purification, amino acid sequence 915.

Sexual reproduction,

- Puccinia coronata*, relationship pathogenicity, *Rhamnus cathartica* 9338.

Shade,

- plantations, nitrogen cycle, nutrient sources, *Theobroma cacao* 3219.

Shading,

- effects on nodulation, nitrogen fixation, Inga jiniculi 7843.
- Erysiphe graminis* powdery mildew, effects on Gramineae senescence 3956.

Shales,

- oil, phosphorus mineralization, *Pseudomonas*, *Rhabdovirus* 556.

Sheath blight,

- Corticium sasakii*, fungicides, disease control, *Oryza sativa* 3148.
- disease resistance, *Sorghum vulgare* 1366.
- Oryza sativa*, height effects on yield 3017.
- Oryza sativa*, *Rhizoctonia solani*, reviews 6766.
- Rhizoctonia solani*, histopathology, *Oryza sativa* 372.
- Rhizoctonia solani*, *Oryza sativa*, overwintering disease control, burning 4953.
- Rhizoctonia solani*, virulence, *Sorghum bicolor*, *Oryza sativa* 1193.

Sheath rot,

- Sarocladium oryzae*, experimental infection, inoculation, methodology, *Oryza sativa* 1188.

Sheep,

- antibodies, visna virus, maedi virus, detection, enzyme-linked immunosorbent assay 2651.
- carcasses, chlorine washing 6684.
- Chlamydia psittaci* isolates, serotyping, immunofluorescence 875.
- digestibility, *Gossypium hirsutum* crop residues, rumen microorganisms, pretreatment, ozone, sodium hydroxide 5533.
- digestibility, *Gossypium hirsutum* crop residues, rumen microorganisms, pretreatment, ozone, sodium hydroxide 5534.
- erythrocytes cell culture secretions, antibacterial activity 6049.
- feeds, crop residues, digestibility 4870.
- milk, antibiotics excretion effects on yogurt production 4871.
- Salmonellosis*, association, food contamination, man 3845.
- toxicity, *Stachybotrys atra*, mycotoxins isolation, bedding straw 4897.
- toxicity testing, teratogenicity testing, nutritive value, single-cell protein, *Chaetomium cellulolyticum* 9116.

Sheep pox virus,

- vaccines, preparation, vaccination, sheep 3458.

Sheep red blood cells,

- antibodies coatings, detection agglutination, rotavirus (human) 9856.

Shelf life,

- blueberries, fungi infection, disease control, carbon dioxide storage 3106.
- meat, bacteria levels, storage conditions 7598.
- spoilage, luncheon meat, *Bacillus*, *Streptococcus* 4872.

Shelflife,

- vacuum packaging, lactic acid bacteria inoculation, *Vibrio* spoilage 8495.
- wastes, stimulation chitolytic bacteria, soil amendment, biological control, soil-borne diseases, *Gossypium hirsutum* 7769.

Shells,

- Arachis hypogaea*, composts, effects on soil microorganisms, organic compounds, soils (sandy) 5133.

Shigella,

- aminopeptidase detection, methodology 871.
- antibacterial activity, bicyclomycin 2595.
- antibiotic resistance, R factors 7044.
- antibiotic sensitivity testing 2393.
- antibiotic sensitivity testing 6111.
- antibiotic sensitivity testing, antibiotic resistance transfer, Italy 8829.
- antibiotic sensitivity testing, mecillinam 3407.
- cetofetant antibacterial activity companion 6134.
- clinical isolates, antibiotic sensitivity testing 714.
- enteritis, clinical isolates incidence, antibiotic resistance, man 8733.
- gastrointestinal tract clinical isolates, norfloxacin antibacterial activity 2455.
- identification, automated methods 861.
- incidence, Ethiopia, drug sensitivity testing, antibiotic sensitivity testing 2525.
- isolates, hospitals, antibiotic resistance 8732.
- media (isolation), use, antibiotics 6338.
- shigellosis, disease spread, hand washing effects on, man, Bangladesh 5356.

Shigella boydii,

- identification, agglutination 4483.

Shigella boydii,

- serotyping, use, agglutination 5405.

Shigella dysenteriae,

- antibodies, assays, passive hemagglutination 882.
- isolation, sewage sludge 6248.
- polysaccharides, carbohydrate composition, immunochemistry 7439.
- relationship, *Escherichia coli* cytotoxins biosynthesis 2962.
- serotyping, use, agglutination 5405.

Shigella flexneri,

- feces, media (isolation) 7251.
- identification, agglutination 4483.
- media (culture) 5418.
- media (enrichment) 3576.
- plasmids, antibiotic resistance, clinical isolates 4280.

- Shigella sonnei**, antibacterial activity, antibiotics + ethonium 1558.
antigen (enterobacterial common), trisaccharides components structure 9196.
clinical isolates, antibiotic sensitivity testing 714.
colicins, production, antibacterial activity, *Escherichia coli* 669.
media (enrichment) 3576.
phages, phage typing 3519.
plants extracts antibacterial activity, Iran 2458.
plasmids, antibiotic resistance, β -lactam antibiotics, aminoglycoside antibiotics 4278.
traveller's diarrhea, vaccines development, man 8048.
- Shigellosis**, disease spread, hand washing effects on, man, Bangladesh 5356.
- Shikimic acid**, metabolism, menaquinones biosynthesis, *Micrococcus luteus* membranes 2839.
- Shikonin- β , β -dimethylacrylate**, alkaline hydrolysis, antibacterial activity, *Micrococcus luteus*, *Staphylococcus aureus*, *Bacillus subtilis* 7081.
- Shoot blight**, *Guignardia laricina*, *Larix leptolepis*, association, phytotoxins 4161.
- Shoots**, Vigna, genotypes, Rhizobium, nitrogen fixation 3234.
wilt, *Erwinia amylovora* amylovorum, host specificity, *Cotoneaster pannosa*, *Spiraea vanhouttei*, *Malus pumila* 3371.
- Shroud of Turin**, dating methods, bacteria, fungi 2645.
- Shrubs**, Tanzania forests, mycorrhizas symbiosis 2296.
- Scale**, cloacops purpurea infected, localization, β -glucanase, β -glucosidase, pathogenesis 3917.
- Sida alba**, virus-like particles, disease transmission, *Bemisia tabaci* 2199.
- Sida spinosa**, weed control, *Colletotrichum malvarum* 1265.
- Siderochelin A**, isolation, Nocardia, racemization, structure 1651.
- Sideromycin**, antibiotic resistance, *Escherichia coli*, association ton A gene proteins 641.
- Siderophores**, Botrytis cinerea, lesions, development, Vicia faba 3000.
detection, electrophoresis methodology, microorganisms 8090.
Vibrio vulnificus, production, association, iron acquisition 8369.
- Sigatoka**, Mycosphaerella muscosa, Musa sapientum 3969.
- Silage**, Beta vulgaris, lactic acid bacteria, inoculum, effects on, fermentation 3854.
corn + animal wastes, fermentation, biochemical characteristics, microorganisms 4868.
effluents, digestion (anaerobic), methanogenesis 8963.
feeds, factors affecting nutritive value 2927.
fermentation, Clostridium growth inhibition, nitrate role 6681.
fermentation, fungi 5629.
fermentation, Pediococcus acidilactici, Lactobacillus plantarum 9282.
fungi, mycotoxins production 4892.
production, Clostridium, lactic acid bacteria, fermentation 8490.
production, factors affecting 249.
propionic acid, preservation 7601.
Trichoderma viride, cellulase, role, Medicago sativa, Lolium perenne, Trifolium pratense 2931.
- Silanes**, role, proteinase immobilization, Aspergillus awamori 1860.
- Silica**, nizin adsorption 8019.
- Silicalite**, adsorption, butanol, Clostridium acetobutylicum, fermentation 4730.
- Silver**, Bacteroides susceptibility 681.
nylon fabrics, antimicrobial activity 3371.
resistance, Pseudomonas 5162.
- Silver leaf**, Chondrostereum purpureum, Prunus domestica, biological control 4067.
- Silviculture**, mixed culture, Populus, biomass, interaction Alnus rubra, nodulation, nitrogen fixation 9512.
mycorrhizas symbiosis 2304.
trees, disease control, Phytophthora root rot 2317.
- Simmondsia californica**, leafspot, pathogenesis, Pleospora herbarium, new records 8578.
- Simulations**, Erysiphe graminis f.sp.hordei, powdery mildew, Hordeum vulgare 8554.
- Simulidiae**, biological control, Bacillus thuringiensis subsp.israelensis, streams 6602.
pest control, toxicity, bacteria 298.
- Simulium damnosum**, larvae, biological control, Bacillus thuringiensis, field trials 6609.
larvae, biological control, Bacillus thuringiensis, storage, tropical environment 6610.
vectors, disease control, biological control, Bacillus thuringiensis 1020.
- Simulium pectus**, biological control, bioassays, pathogens, Culiciniomyces clavosporus 7483.
- Simulium soubrense-santipauli**, biological control, Bacillus thuringiensis, field trials 1026.
- Simulium vittatum**, biological control, bioassays, pathogens, Culiciniomyces clavosporus 7483.
biological control, pathogenicity, mortality, Culiciniomyces clavosporus 9209.
- Sinapyl alcohol**, biodegradation, Schizophyllum commune 162.
- Sindbis virus**, antiviral activity, phenylheptatriene 7097.
core protein, amino acid sequence 7293.
- Sinefungin**, Streptomyces griseolus, inhibition, Lycopersicon esculentum, 1-aminocyclopropane-1-carboxylate synthase, ripening 7593.
- Singapore**, new records, Pythium aphanidermatum damping-off, Brassica 1259.
- Single-cell protein**, production, whey, Kluyveromyces fragilis, Kluyveromyces fragilis 4732.
- Single-cell protein**, Arthrobaacter simplex, feeding trials, effects on hematology, organs histology, rats 8491.
Arthrobaacter simplex, nutritive value, rats, hydrocarbons, carbon sources 7597.
Aspergillus fumigatus, Manihot esculenta, nutritive value, rats, pigs 2932.
Basidiomycetes, amino acid composition, chemical composition, physicochemical properties, toxicity testing, animal models 9113.
biosynthesis, Aspergillus terreus, bagasse fermentation 1826.
biosynthesis, Aspergillus terreus, bagasse metabolism 3662.
biosynthesis, methanol utilization, Pichia pastoris isolation, characterization 5466.
Candida tropicalis, amino acid composition, production, acids hydrolysis, Oryza sativa crop residues 9109.
Candida utilis, chemical composition, amino acid composition, production, industrial effluents, distilleries 9118.
Candida utilis, feeding trials, immune response, gastrointestinal tract, pigs 2529.
Chaetomium cellulolyticum, production, lignocellulose biodegradation, nutritive value, toxicity testing, laboratory animals 9116.
conferences 10006.
economics, technology 9106.
economics, technology 9114.
fatty acids, feeding trials, cattle, association cow's milk 250.
feeding trials, allergenicity, man, laboratory animals 9283.
feeding trials, food industry 9284.
microorganisms, nutrient sources, dogs 3851.
nutritive value, production, economics, technology 9107.
Penicillium commune, amino acid composition, feeding trials, rats, rabbits 4858.
production 4865.
production, Aspergillus terreus, cellulose fermentation 8205.
production, bacteria, fermentation, crop residues 9110.
production, Candida, molasses, wine fermentation sediments, nutrient sources 5628.
production, Candida tropicalis, use cellulose hydrolysis, cellulolytic bacteria 4774.
production, Candida tropicalis, Yarrowia lipolytica, petroleum biodegradation 5992.
production, Candida utilis, musts 5472.
production, cheese whey conversion, yeasts 9286.
production, economics, crop residues, food industry, industrial wastes 9108.
production, fungi, hydrocarbons 4769.
production, fungi, yeasts, bacteria 7802.
production, Fusarium, Sporotrichum, crop residues, food industry, industrial wastes 9112.
production, Methylobionas clara, methanol substrates 3659.
production, methylotrophic bacteria isolation, propagation 9288.
production, microorganisms, petroleum use 2930.
production, nutritive value, crop residues 9111.
production, nutritive value, feeds 9115.
production, Saccharomyces lipolytica, association, olives food processing waste water 8212.
production, straw, Triticum, Myrothecium verrucaria 1084.
production, use, wastes, books 10000.
Saccharomyces fragilis, nutritive value, feeding trials, chickens 7608.
Schwannomyces castelli, yeasts production 2043.
Torula, feeding trials, chickens 3856.
yeasts, calcium, phosphorus, supplementation, feeding trials, chickens 9285.
yeasts, cell walls lysis, Streptomyces lytic enzymes 7583.
yeasts, production, distilleries, industrial effluents, nutritive value, rats 8489.
yeasts, production, media (culture), Helianthus tuberosus, extracts 7606.
- Siphonaria pectinata**, pectinase, antimicrobial activity 8910.
- Siroheme**, interaction iron-sulfur centers, E.S.R., sulphite reductase (NADPH), *Escherichia coli* 2807.
- Sisomicin**, antibacterial activity, bacteria, clinical isolates 3425.
antibiotic synergism, azlocillin, Pseudomonas aeruginosa 8449.
+ azlocillin, antibacterial activity, in vitro models 747.
biosynthesis, Micromonospora lyonsensis, pH effects on 6229.
- Sitobion avenae**, barley yellow dwarf virus, infection, Hordeum vulgare, Avena sativa, effects on, disease transmission 8553.
barley yellow dwarf virus strains transmission interference 6749.
honeydew, + barley yellow dwarf virus infection effects on pathogenicity, Cladosporium infection, Hordeum vulgare, Triticum aestivum 3934.
- Sitodiplosis meiolana**, association Septoria nodorum, glume blotch, triticum 1187.
- Skatole**, odors compounds, biodegradation, Pseudomonas, Bacillus, Corynebacterium 5580.
- Skeletonema costatum**, comparison, Phaeodactylum tricornutum, extracts, antibacterial activity, *Staphylococcus* 7162.
- Skin-milk**, coliforms recovery, media (enrichment) 218.
freeze-thawing, viability, bacteria, Saccharomyces cerevisiae 220.
inhibition tobacco mosaic virus infection, Nicotiana glutinosa, Nicotiana glauca 6887.
survival, Campylobacter fetus subsp.jejuni, Campylobacter fetus subsp.intestinalis, pH, temperature effects on 217.
- Skin**, disinfection, antimicrobial agents, man, books 6359.
disinfection, antimicrobial agents topical application, man, reviews 6278.
infection, prophylaxis, use, chlorhexidine soaps, man, reviews 6276.
tissue culture, sodium hypochlorite decontamination, *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Candida albicans* 8092.
- Skin tests**, use, penicillin derivatives, synthesis 8852.
- Slide culture**, bacteria viability, freshwater environments 3562.

Subject Index

Slide preparation,
fungi, media 2723.

Slides,
preparation, powdery mildew, *Malus* 6351.

Slope,
exposure, erosion relationship, grasses cover, soil biochemical characteristics, microorganisms activity 7826.

Sludge,
assays, proteolytic bacteria, methodology 850.
disinfection, pathogens, wastewater treatment 9805.

Sludges,
air drying, association, viruses infectivity 7195.
digestion (anaerobic), temperature effects on 7199.
digestion (anaerobic), temperature effects on, kinetics 7200.
treatment, disposal, bibliographies 1697.

Slurries,
cattle animal wastes, *Escherichia coli*, *Salmonella typhimurium*, survival, isolation, drug resistance 2617.
systems, pentosans hydrolysis 9262.

Smoke,
effects on, *Pseudomonas syringae* pv. *syringae*, *Erwinia herbicola*, ice nuclei formation, activity 8527.

Smoking,
ham, curing, contamination, growth, yeasts, fungi, bacteria 180.

Snout,
Cochliobolus sativus, effects on, *Agropyron intermedium*, nutritional status 8548.
Echinochloa frumentacea, incidence, India 2138.
Entyloma dactyloides, *Entyloma brizae*, Gramineae 2129.
Saccharum, disease resistance, heritability, diseases grades comparison yield 6859.
Saccharum officinarum, disease resistance 2258.
Saccharum officinarum, *Ustilago scitaminea* races characterization, neutron activation analysis 6760.
Tolyposporium penicillariae, disease resistance, *Penisetum americanum*, field toxicity screening 9455.

Tolyposporium penicillariae, pollination, *Penisetum americanum*, effects on, pathogenesis 6777.
Ustilago coicis, incidence, Coix lachryma-jobi, Thailand 5770.
Ustilago esculenta, *Zizania latifolia* 373.
Ustilago maydis, incidence, fertilizers stimulation, Zea mays 9324.
Ustilago scitaminea control, Saccharum officinale, Hawaii 5709.
Ustilago scitaminea, disease resistance markers, glycosides, buds, Saccharum officinale 9359.
Ustilago scitaminea, disease resistance, Saccharum officinarum 470.
Ustilago scitaminea, Saccharum officinarum 1175.

Snow mold,
Triticum aestivum 1194.

Soaps,
+antimicrobial agents, use, man, reviews 6277.
chlorhexidine, use, prophylaxis, skin infection, man, reviews 6276.
contamination, microorganisms 2641.
industrial wastes, biodegradation, reviews 5579.

Sodium,
aspartate kinase activation, *Escherichia coli* 6536.
microorganisms enzymes, forests soil analysis, land reclamation 7822.

Sodium acetate,
ion, oxygen distribution, *Penicillium multicolor* tetroneic acids 7287.

Sodium benzoate,
+acids, effects on heat inactivation, yeasts, fruit juices 5636.
+inhibition, bacteria, coal, waste water, drainage systems 8713.
levels effects on *Pseudomonas fluorescens*, m-chlorobenzoate cometabolism 2016.
yeasts sensitivity 7093.

Sodium bicarbonate,
+hydrogen peroxide, effects on oral microflora, periodontitis, man 5353.

Sodium borate,
+sodium chlorate, stimulation fruits, *Colletotrichum truncatum*, Phomopsis, anthracnose, stem blight, Glycine max 5821.

Sodium carbonate,
effects on *Plasmiodiophora brassicae* clubroot, crop fields 314.
soil amendment, effects on enzymes activity, soil microorganisms 5927.

Sodium chlorate,
mixed culture, *Nitrosomonas europaea*+*Nitrobacter winogradskyi*, effects on nitrification 5106.

+sodium borate, stimulation fruits, *Colletotrichum truncatum*, Phomopsis, anthracnose, stem blight, Glycine max 5821.

Sodium chloride,
antimicrobial activity, airborne microorganisms, fungi, synergism, ethanol+acetic acid+essential oils 7115.

blood culture, phosphate buffers, *Legionella pneumophila* 851.
cheddar cheese production, effects on clostridium growth 4850.

+chlorotetracycline, treatment, seafood, effects on bacteria, spoilage 2922.
effects on, lysine, levels, *Saccharomyces cerevisiae*, growth 17.
eggs, effects on heat resistance, *Micrococcaceae* 4848.

+heat treatments, peanuts removal, peanuts 6689.
+hydrogen peroxide, dental plaque, man, toothbrushing comparison 8075.
= potassium chloride, cheddar cheese ripening, *Staphylococcus aureus*, growth, enterotoxins biosynthesis 2037.

preservatives, antimicrobial activity 706.
soil amendment, effects on enzymes activity, soil microorganisms 5927.
tolerance, *Rhizobium japonicum* characterization, Glycine max nodulation 6976.

Sodium chlorite,
mixed culture, *Nitrosomonas europaea*+*Nitrobacter winogradskyi*, effects on nitrification 5106.

Sodium dithionite,
reduction putidomycinoxin, kinetics, *Pseudomonas putida* 2790.

Sodium dodecyl sulfate,
solubilization, plasma membranes, *Pseudomonas aeruginosa* 9664.

Sodium dodecylbenzene sulfonate,
effects on *Serratia marcescens* endonuclease activity, growth 2460.

Sodium fluoride,
mouthwashes, plaque index, acid production, dental caries, man 7210.
mouthwashes, prophylaxis, dental caries, children 8990.

Sodium hydroxide,
association, straw biodegradation, hydrolysis, rumen microorganisms 4751.
detoxification, aflatoxin B1, mutagenicity, toxicity 278.
+heat, pretreatment, Zea mays crop residues, hydrolysis, cellulase, *Trichoderma*

Sodium hydroxide, (continued)

vinde 8448.
pretreatment, bagasse, cellulase production, *Trichoderma reesei* 8449.

pretreatment, cotton, biodegradation, carbohydrate-degrading bacteria, rumen microorganisms 1062.

pretreatment, sheep, rumen microorganisms, digestibility, *Gossypium hirsutum* crop residues 5633.

pretreatment, sheep, rumen microorganisms, digestibility, *Gossypium hirsutum* crop residues 5634.

Sodium hypochlorite,
Bacillus subtilis spores resistance 5177.
decontamination, skin tissue culture, *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Candida albicans* 8092.

detoxification, aflatoxin B1, mutagenicity, toxicity 278.
disinfection, hand, man 616.

Sodium lauryl sulfate,
inhibition, bacteria, coal, waste water, drainage systems 8713.

Sodium metabisulfite,
ferrous sulfate, sodium pyruvate, subsp. *jejunii*, effects on, *Campylobacter fetus* subsp. *jejunii*, morphology, motility, viability 9974.

Sodium molybdate,
Asotobacter, effects on nitrogen fixation 3233.

Sodium nitrite,
sensors, use, *Nitrobacter immobilized* cells, oxygen electrodes 5430.
use, *Salmonella* growth inhibition, meat products 3838.

Sodium orthophenylphenate,
antifungal activity, oranges green mold, comparison, thiabendazole, CGA-64251 1319.

Sodium pentachlorophenate,
disease control, sap stain, wood storage, *Linodendron tulipifera*, *Pinus* 9529.

Sodium phytate,
mouthwashes, effects on dental plaque formation, man 8989.

Soft rot,
Botryodiplodia theobromae, life cycle, *Dioscorea* 5791.

Citrus sinensis, association pectinolytic enzymes, *Aspergillus aculeatus*, *Botryodiplodia theobromae* 3965.

Erwinia carotovora, pathogenicity, storage, culture collections 2239.
Erwinia carotovora, pectinolytic enzymes, oxygen effects on, potatoes 5033.

Erwinia carotovora subsp. *carotovora*, pathology, *Lactuca sativa* 9384.
Erwinia, *Solanum tuberosum* 6809.

Pseudomonas, *Cactaceae* 1291.
Pseudomonas marginalis, post-harvest decay, tomatoes, storage conditions 9453.

Thielaviopsis paradoxa, *Citrus medica*, factors affecting enzymes 5738.
tubers, *Solanum tuberosum* 5752.

Softwoods,
comparison, lignocellulose biodegradation, *Coriaria versicolor* 170.

Soil,
acetylene reduction, conversion factors, comparison, nitrogen fixation, water content nitrogenase activity, effects on 7005.

acidification, inhibition *Verticillium dahliae*, root rot, *Datura stramonium* 6837.

acidification, nitrogen mineralization, forests, mathematical models 4138.

Actinomodara ecological distribution, antibiotics, antagonism gram-positive bacteria 1487.

Actinomodara incidence, USSR 5923.

Alcaligenes, denitrification, hydroxylamine, pyruvic oxime, nitric-oxide reductase, nitrate reductase 596.

anaerobic bacteria, catalase activity, crop rotation, fertilization, USA 2382.

analysis, nitrate reduction, nitrite reduction, anaerobiosis conditions 7845.

Aspergillus, nitrification, nitrogen sources 3584.

assays, proteolytic bacteria, methodology 850.

ATP, biomass, soil microorganisms, measuring techniques 6939.

ATP indicators, biomass, soil microorganisms 5100.

ATP levels, soil treatment effects on 565.

Asotobacter, potassium, nutrient sources 7823.

bacteria biomass, agricultural practices, meadows 9534.

bacteria, carbon sources, seeds germination exudates 551.

bacteria, colony-forming cells, growth, multiplication, mathematical models 2345.

bacteria, nitrogen fixation, USSR 2361.

bacteria, species diversity, Pahokee muck, community structure, population density, respiration, enzymatic activity, environmental conditions, ecological distribution 5912.

bacteria, straw biodegradation, phytotoxicity 8419.

Basidiomycetes mycelia growth, association, plants 1478.

Beauveria bassiana, clays, coatings, role, survival 7816.

binding, extracellular enzymes, activity, soil microorganisms 2344.

biochemical characteristics, microorganisms activity, grasses cover, slope exposure, erosion relationship 7826.

Botrytis cinerea sclerotia, isolation methodology 9568.

Brazil, *Bacillus* role nitrogen fixation 5961.

Calluna vulgaris heaths, fatty acids isolation, identification, phytotoxicity, antifungal activity 5929.

Calluna vulgaris heaths, microorganisms biodegradation production fatty acids, antifungal activity, seasonal variations 5930.

carbon dioxide release, relationship, microorganisms biomass measurement 1969.

catalase immobilization, factors affecting 4226.

catalase kinetics, temperature effects on 3200.

catalase, proteolytic enzymes effects on 3201.

cellulose biodegradation, measuring techniques 1058.

Cephalosporium navicularis sp. nov., predation, *Adineta* 9545.

Cephalosporium gramineum, effects on, *Triticum*, straw, biodegradation 8451.

Soil, (continued)

decontaminating bacteria, urine effects on nitrogen balance 2371.
dieback, disease control, plants soil mixtures 4925.
disinfection, association, vegetables contamination, bacteria 3253.
distribution, *Azotobacter chroococcum* 5934.
drying, storage conditions, soil microorganisms, species diversity 5856.
Ensfier adherens, predatory behavior, characterization, use, phages, monitoring 5080.
enzymatic activity, acid-base regulation 3203.
enzymatic activity, extraction 4215.
enzymatic activity, plowing effects on 4216.
enzymes activity, pH effects on 2338.
enzymes activity, storage effects on soil microorganisms 5919.
epizootology, nuclear polyhedrosis virus, *Mamestra brassicae* 1470.
extracts, Eucalyptus forests, effects on sporulation, *Phytophthora cinnamomi*, *Phytophthora cryptogea* 525.
Fagus sylvatica forests, bacteria population density 4142.
Finland, nitrogen cycle, N-(phosphonomethyl)-glycine effects on 5972.
flooding, iron reduction, metabolism, bacteria 6959.
forests, acetylene reduction, nitrogen fixation, measuring techniques 7835.
forests, analysis, sodium, microorganisms enzymes, land reclamation 7822.
forests, Cenozoocoom geophilum sclerotia abundance 6894.
forests, effects on *Phytophthora*, survivability, germination, infectivity, mycelia, chlamydospores 1483.
forests, fungi, abundance, species composition 3160.
forests, nitrogen mineralization 523.
forests, sulfonitrovinose sulfur mineralization, soil microorganisms, USA, North Carolina 6904.
freezing - drying, effects on soil microorganisms 579.
fumigation, disease control, corky root, *Lycopersicon esculentum* 1264.
fumigation effects on maize chlorotic mottle virus incidence 2116.
fumigation, Fusarium oxysporum f.sp. melonis invasion 5898.
fumigation, methyl bromide, effects on mycorrhizas, *Vitis vinifera*, relationship, stunt 5987.
fungal flora, osmotic stability, surveys, Syria 7817.
fungi, benodanil, media (selective) 1404.
fungi, Beta vulgaris - crop rotation, insecticides, herbicides, effects on 618.
fungi, herbicides effects on 8707.
fungi, mycorrhizas, nutrient cycles, stands, *Pseudotsuga menziesii*, USA, Oregon 6905.
fungi, nutrient cycles, ecosystem analysis 5889.
fungi, phosphate solubilization, carbon sources 9533.
fungistasis, bacteriostasis 3179.
fungistasis, nutrient availability, germination, *Macrophoma phaseolina* sclerotia, *Thielaviopsis basicola* chlamydospores, *Cochliobolus victoriae* conidia 9572.
Fusarium crookwellense sp. nov., ecological distribution 3204.
Fusarium, media (isolation) 3184.
Gaumannomyces graminis suppression, effects on phytopathogenic fungi infection, Avena 3205.
Gaumannomyces graminis suppression, effects on phytopathogenic fungi
Gaumannomyces graminis var. tritici, crops effects on survival 3964.
Germany, Fed. Rep., keratinophilic fungi, incidence 3185.
grasslands, nitrogen cycle, fertilization 3614.
greenhouses, source, dispersal, *Pythium*, *Rhizoctonia solani* 3698.
guanine, adenine, cytosine, thymine, uracil, biodegradation 5890.
heat treatments, *Pseudomonas maltophilia*, biodegradation, herbicides 5904.
humus formation, role melanins, Coprinus, chemical composition 9218.
hydrogenase, hydrogen, oxidation 5917.
improvement, association, *Rhizobium trifolii* inoculation, Trifolium, British Isles 6953.
incubation, *Azotobacter chroococcum*, nitrogen fixation, nitrogen sources, Zea mays 4232.
inoculum, *Cylindrocylindrium coterialiae*, black rot, spatial distribution, *Arachis hypogaea* 1123.
iron, chelating agents, *Boletus edulis* extracts 9558.
isolation, *Cochliobolus sativus*, media (selective) 4526.
isolation, *Laetisaria arvalis*, media (selective) 4212.
isolation, *Pseudocercospora herpotrichodes*, spores, rainfall dispersal 5921.
isolation, *Streptomyces*, antibiotics 3390.
Japan, carbon dioxide gas production, temperature, dissolved organic carbon, effects on 8668.
Leptomyxidia, lysis, phagocytosis, *Gaumannomyces graminis* var. tritici.
Phytophthora cinnamomi, *Cochliobolus sativus* 563.
location, *Sclerotium cepivorum* sclerotia, association, viability 6972.
Manihot utilisima, rhizosphere microorganisms metabolism 5918.
media (isolation), *Trichoderma*, methodology 2711.
milk biodegradation, microorganisms 163.
minerals, association, *Tsuga heterophylla*, ectomycorrhizas symbiosis, relationship, survival 3164.
mines + soil amendment, Agropyron trachycaulum, vesicular-arbuscular mycorrhizas symbiosis 4203.
mixtures, plants dieback disease control 4925.
mulches, poly(ethylene) effects on *Sclerotium oryzae* sclerotia 1513.
mycorrhizas, saprophytes, fertilizer applications effects on, nutrient deficiency, Pinus 7775.
Myxobacterium survival: *Mycrococcus luteus*, host-parasite interactions 9569.
nematophagous fungi, Eire 4214.
nitrate reduction, association, tillage, crop production (no-tillage), USA, Maryland, USA, West Virginia 5950.
nitrification, acetylene pressure effects on 617.
nitrification, relationship, soil amendment, animal wastes, ammonium sulfate 7834.
nitrogen balance, association crop production (no-tillage), Zea mays 6986.
nitrogen, availability, measuring techniques, books, conferences 9098.
nitrogen fixation, nitrogen-fixing bacteria, forests ecosystems, reviews 9511.
nitrogen mineralization, Fagus forests, association, nitrifying bacteria, ammonifying bacteria, seasonal variations 4137.
Nocardia like *Mycobacterium* isolation, Zaire 3193.
North America deserts, cryptogams characterization 5887.
nuclear polyhedrosis virus isolation, methodology 1783.
nutrient availability, environmental stress, competition, fungi, sclerotia germination 9573.
nutrient cycles, decomposition, mathematical models, books 5448.
nutrient cycles, mineralization, sulfur, nitrogen, soil microorganisms 6996.
organic matter accretion, nutrient cycles, biological activity, mudflows, USA,

Soil, (continued)

California, montane environments 9566.
organic matter, association, vesicular-arbuscular mycorrhizas growth 7810.
organic matter formation, role, soil microorganisms 1491.
organic matter turnover, bacteria 5096.
Oryza sativa irrigated areas, survival, *Colletotrichum gloeosporioides* f.sp. aeshchynomene 1189.
paddy fields, nitrogen fixation, pesticides effects on, heterotrophic bacteria 619.
parathion hydrolysis, role, *Bacillus*, *Arthrobacter* 160.
parathion hydrolysis, role, soil microorganisms 155.
pasture, *Pythium splendens* suppression, germination, growth 9551.
pentachlorophenol biodegradation, *Arthrobacter* 2891.
persistence, *Bacillus thuringiensis* spores, biological control, insecta 1007.
pesticide applications, carbofuran, disease transmission, maize chlorotic dwarf virus, maize dwarf mosaic virus, vectors, *Graminella nigrifrons*, *Rhopalosiphum maidis* 7738.
phosphate solubilization, phosphate-dissolving bacteria, *Aspergillus niger* 3214.
phosphates content, relationship, microorganisms phosphates solubilization 4195.
phosphonates, New Zealand, relationship, bacteria 1469.
physicochemical properties, effects on phosphate activity, soil microorganisms 5089.
Phytophthora cinnamomi chlamydospores survival, infection, *Lupinus angustifolius* 5693.
Phytophthora cinnamomi distribution, bioassays, association plant diseases 539.
Phytophthora cinnamomi, media (selective), bioassays, *Abies fraser* seedlings, *Rhododendron obtusum* leaves 324.
Phytophthora megasperma f.sp. glycinea, isolation methodology, association, *Pythium* contamination 589.
Picea forests, sulfate conversion, soil microorganisms 6903.
Pinus leucodermis forests, Basidiomycetes, new records, Yugoslavia 7778.
plants lignin biodegradation, carbon, incorporation 5599.
pollutants, microorganisms metabolites, phytotoxicity, *Cucumis sativa* 4193.
population dynamics, microorganisms, soil analysis, methodology 4224.
production, antibiotics, *Streptomyces*, reviews 4403.
protozoa, interaction, bacteria 552.
Pseudomonas aeruginosa, cell death, characterization 2353.
Pseudomonas cepacia nitrogen mineralization, grazing, association, Mesodiploaster, *Acanthamoeba polyphaga*, effects on 614.
Pseudomonas paucimobilis, growth, nutrition, ATP production, relationship, nitrogen levels 4218.
Pseudomonas solanacearum, vertical distribution, wilt, *Lycopersicon esculentum* 5759.
Pseudomonas syringae pv. lachrymans survival, association, pathogenicity, *Cucumis sativus* 9574.
reactors, nitrification, *Nitrosomonas europaea*, *Nitrobacter agilis* 2357.
redox potential, relationship, *Ceratocystis wagenii* infection, *Pinus ponderosa* 9516.
relationship microorganisms, mountains, USSR 7827.
removal, pasture restoration effects on microorganisms biomass 3182.
respiration, enzyme activity, *Allophophora caliginosa*, *Lolium perenne*, effects on 5103.
Rhizobium, enumeration, counting methods 610.
Rhizobium, salinity, effects on, growth, nitrogen fixation 597.
Rhizoctonia solani population levels, anastomosis, association, *Arachis hypogaea*, USA, Texas, USA, New Mexico 5094.
Saccharum officinale, rhizoplane microorganisms, *Streptomyces*, characterization 6978.
saline environments, isolation, bacteria 3196.
salt marshes, factors affecting denitrification 2367.
sampling methodology effects on acetylene reduction 7831.
Sclerotium graminicola zoospores viability, infectivity 6959.
seasonal variations, *Rhizoctonia solani*, isolation, plants 2097.
sediments, relationship, microorganisms membranes lipids 5104.
solar radiation, effects on soil-borne diseases, fungi 7754.
Streptomyces scabies, isolation 3192.
sulfate metabolism, forests ecosystems 5102.
suppression, plant diseases, conferences 1518.
suppression, plant diseases, disease control, books 904.
surveys, cellulolytic microorganisms, fungal flora, Syria 7815.
surveys, thermophilic fungi, Syria 7818.
survival, vertical, phytopathogenic fungi 7807.
Sweden, heavy metals gradients, respiration, fungi population dynamics association 6898.
Thiobacillus thioarum, Desulfovibrio, sulfur conversion, continuous culture 7793.
tomato mosaic virus persistence, infection, *Lycopersicon esculentum* 1233.
treatment, mycelia, organic matter, nitrogen mineralization 5949.
tritium uptake, association, biological activity, USA 3209.
tropical environment, incidence, sulfate-reducing bacteria 3178.
tundra, human impact, motor vehicles, arylsulfatase activity, soil moisture, USA, Alaska 6951.
urease activity 616.
USA, North Carolina, *Pseudomonas solanacearum* survival, *Lycopersicon esculentum* wilt 8675.
USA, Ohio, maize white line mosaic virus detection 1200.
USA, ammonification, bacteria 7808.
USSR, rhizosphere micro, rhizoplane microorganisms, content, zinc, lead 2334.
vesicular-arbuscular mycorrhizas, fumigants, fungicides effects on 622.
vesicular-arbuscular mycorrhizas, growth 5092.
vesicular-arbuscular mycorrhizas saprophyte, relationship, organic matter 8672.
volcanic ash, volcanizing microorganisms, biodegradation, straw, role 5091.
water, association, *Gaumannomyces graminis* var. tritici take-all, *Triticum* 491.
water potential, effects on, *Phytophthora parasitica* var. nicotianae, infection, *Nicotiana tabacum* 9393.
water potential, growth, *Pythium ultimum*, population dynamics 4228.
Xanthomonas campestris pv. campestris, media (isolation) 6309.
yeasts, algae, bacteria, Antarctica 1475.
yeasts, isolation 5896.
yeasts, media (isolation) 6348.

Soil aeration,

spore germination, survival, *Verticillium dahliae* 6968.

Soil amendment,

animal wastes, ammonium sulfate, relationship, soil nitrification 7834.
calcium hydroxide, effects on nitrogen fixation, nodulation, *Elaeagnus umbellata*

Soil amendment, (continued)

1506.
carbendazim, flumeturon, curacron, effects on, soil microorganisms, fungi 2379.
carbon, sodium chloride, sodium carbonate, effects on enzymes activity, soil microorganisms 5927.
copper, bactericidal activity, *Escherichia coli* survival, soils (organic) 8708.
crop residues, organic matter decomposition, soil microorganisms, C/N ratios 5986.
diallyl disulfide, effects on, incidence, *Sclerotium cepivorum* sclerotia 1514.
effects on Rhizobium, nodulation, yield, Glycine max 9582.
manure, fertilizers, soil microorganisms, enzymatic activity, redox potential, paddy fields, *Oryza sativa* 9623.
+mines soil, Agropyron trachycaulum, vesicular-arbuscular mycorrhizas symbiosis 4203.
mycorrhizas, Pinus taeda, mines, land reclamation, revegetation 2302.
nitrate, effects on, *Glomus mosseae* symbiosis, Zea mays 4204.
plants, humification 2324.
revegetation, land reclamation, mines, vesicular-arbuscular mycorrhizas colonization roots, Agropyron trachycaulum 9542.
sawdust, effects on population dynamics, *Fusarium udum* 3252.
sewage sludge, effects on soil microorganisms, growth 5988.
sewage sludge, Leguminosae Rhizobium japonicum survival association 7832.
shellfish wastes, stimulation chitinolytic bacteria, biological control, soil-borne diseases, *Gossypium hirsutum* 7769.
straw, effects on nitrogen fixation, rhizosphere, Zea mays 9598.
strip mines, effects on, spores, vesicular-arbuscular mycorrhizas, ectomycorrhizas, association, Agropyron trachycaulum, *Picea glauca* 1480.
tannins, effects on, *Pseudomonas solanaceae*, *Penicillium*, respiration, glucose oxidation 593.
urine, urea, nitrogen fixation, *Trifolium repens*, pasture 3240.
waste water, agricultural practices, microbiology, bibliographies 2607.
- Soil analysis,**
population dynamics, microorganisms, methodology 4224.
- Soil characteristics,**
pesticide residues, carbofuran, fonofos, effects on soil microorganisms 8705.
Phytophthora omnivora, geographical distribution, limiting factors, environmental requirements 9557.
soil moisture, thermophilic microorganisms, dehydrogenase activity, plant communities, deserts 9559.
- Soil chemistry,**
agricultural land, acidity, nitrogen fixation, Leguminosae 5956.
bioremediation, decomposition, soil properties, soil microorganisms 574.
soils (saline), community composition, soil microorganisms 7819.
- Soil compaction,**
effects on nodulation, nitrogen fixation, Glycine max 6999.
- Soil depth,**
Dactyloctenidia, ecological distribution, forest floor 5849.
soil microorganisms, environmental factors, relationship, *Verticillium dahliae* fungistasis 584.
- Soil fauna,**
association, Zea mays, bacteria, fungi 6941.
- Soil fertility,**
effects on, rhizosphere microorganisms, coliforms 7798.
relationship *Laetisaria fuciformis* infection, *Lolium perenne* 9357.
- Soil flora,**
fungi, forest floor, interspecific relationships, Onitridae, reviews 5069.
- Soil fumigation,**
wheat mosaic virus infection, *Triticum aestivum*, effects on 9499.
- Soil fungitaxis,**
benomyl, *Secale cereale* 5836.
- Soil horizons,**
Fagus forests, aerobic bacteria levels, seasonal variations 524.
- Soil microorganisms,**
abattoirs, industrial effluents effects on, soils (loam) 2381.
Abies alba forests regeneration 534.
acetic acid decomposition, N.M.R. 9664.
Actinomycetes, antibiotics biosynthesis, screening, micromethods, radioactive labelling tracers 9882.
activity, insecticides effects on 5970.
activity, soil moisture, organic matter, deserts 8665.
adenosine phosphorylation ratio 4220.
agricultural practices, mycotoxins, conferences 6368.
amino acids production, hydrocarbons utilization 7284.
amoeba, phagocytosis, fungi, take-all, *Triticum aestivum* 4223.
association Glycine max, propachlor effects on 7862.
ATP, biomass, soil, measuring techniques 9399.
bacteria, α -hydroxy acid production 2743.
bacteria, cold tolerance 8552.
bacteria, gallic acid biodegradation 7563.
bacteria, incidence, distribution, factors affecting 588.
bacteria, population changes, *Fagus sylvatica* forests, clear cutting, *Picea abies* replacement 7779.
bacteria, respiration, soils (loam), sterilization, storage, effects on 6977.
biodegradation, carbaryl, pesticide residues, nutrient requirements, flooded soils 9620.
biodegradation, herbicides, MCPB 5971.
biodegradation, herbicides, molinate, soil types 5886.
biodegradation, industrial wastes, land disposal, bogs 6360.
biodegradation, industrial wastes, oil and gas industry, land disposal, petroleum 5983.
biodegradation, mineralization, phenmedipham, *Pseudomonas* 5926.
biodegradation, nitrogen pesticide residues, persistence, mobility, soil characteristics, Canada 8704.
biodegradation, phenmedipham, soil pH effects on mineralization 5928.
biodegradation, wood preservatives, land disposal, reviews 5985.
biogeochemistry, species diversity, bacteria, fungi, USSR 2347.
biomass, activity, agricultural land 8662.
biomass, ATP indicators, soil 5100.
biomass degradation, mineralization 2340.
biomass, enzymatic activity, biomass, agricultural practices effects on 5980.
biomass labelling, degradation, nitrogen cycle 2339.
biomass, phosphorus, measuring techniques 572.
biomass, respiration, measuring techniques 8666.
cadmium uptake 1469.
carbon biodegradation, soils (volcanic) 159.

Soil microorganisms, (continued)

- carbon sources, soil denitrification 613.
cartap effects on 3248.
caves 1486.
cellobiose mineralization 7812.
chemical pollution, benzene, biodegradation 6952.
cis-abinol conversion 133.
clay, effects on vegetation, nitrogen cycle 603.
colonization, *Cochliobolus sativus*, conidia, hyphae, fluorescence microscopy 3625.
community composition, soil chemistry, soils (saline) 7819.
community composition, soil properties 8663.
crops, fungal flora, specificity 3181.
crops, weather, effects on 5924.
cutin biodegradation 5931.
cytolysis, yeasts 581.
decomposition, Acer rubrum leaf litter, flooding, nutrient dynamics 4194.
decomposition, catechol, chlorocatechol 6967.
decomposition, crop residues, food processing solid wastes, land disposal, reviews 5981.
decomposition, crop residues, *Medicago littoralis*, nitrogen sources, uptake, *Triticum aestivum* 7001.
decomposition, industrial wastes, pharmaceuticals, land disposal, reviews 5984.
decomposition, lignin, humic acids, melanin 1476.
decomposition, organic compounds, toxicants, land disposal, reviews 5977.
decomposition, plant debris, leaching, *Trifolium* 566.
decomposition, soil wastes, land disposal, reviews 5976.
degradation, fungi melanins, soils (sodic) 2335.
denitrification, fertilizers 3246.
denitrification, mineralization, agricultural practices, crop fields, *Trifolium* 8690.
denitrification, respiration, redox potential, flooded soils 6957.
dry separation, isolation methodology 1734.
ecological distribution, dunes stabilization, deserts, India 1473.
ecology, books 3635.
effects on, plants, yield, tropical environment, bogs 8181.
enterobacterin, effects on, soil properties 4256.
enzymatic activity, phosphatidyl choline, degradation, mineralization, nutrient sources, plants 5915.
enzymatic activity, roads salts, pollution effects 7801.
enzymatic activity, soil properties, environmental impact, recreation, forests 6892.
enzymatic activity, soil amendment, carbon, sodium chloride, sodium carbonate, effects on 5927.
enzymes activity, soil, storage effects on 5919.
ethylene production, novobiocin, cycloheximide, effects on 5907.
extracellular enzymes activity, binding soil 2344.
factors affecting nitrogen cycle, aquatic ecosystems, terrestrial ecosystems, conferences 308.
forests, air pollution, sulfur dioxide effects on 5854.
forests, biological activity, biodegradation, wood, Canada 6893.
forests, canopies effects on nitrogen cycle 512.
forests, population studies, spatial distribution, *Tricholomopsis platyphylla* 1445.
forests soil nitrogen mineralization 523.
fungal flora, community composition, deserts, Kuwait 8673.
fungal flora, seasonal variations, community composition, crop fields, *Brassica campestris* 9546.
fungal flora, surveys 7814.
fungi, growth, spore germination, ammonia, volatiles, effects on 2349.
fungi, isolation, urea, media (culture) + valdimerin 2709.
fungi, soil amendment, carbendazim, flumeturon, curacron, effects on 2379.
glucose radioactive labelling, polysaccharides decomposition 1474.
Gramineae crop rotation effects on 623.
growth inhibition, prophan, mediotetrabactate 3249.
growth, soil amendment, sewage sludge effects on 5988.
habitat diversity 6960.
herbicides effects on respiration 5975.
hydrocarbons gas production, soil moisture, nitrate effects on, anaerobic conditions 9567.
infectivity, roots, *Trifolium repens* 350.
inhibition growth, Rhizobium, in vitro 6963.
insecticides effects on enzymes activity, agricultural land 5969.
leaf litter decomposition, analytical techniques 2351.
leaf litter decomposition, nitrogen cycle 2362.
leaf litter decomposition, nutrient availability, sulfur, acid rain, pollution effects 9507.
leaf litter, Pinus, methyl bromide, dazomet, effects on 3250.
leaves decomposition, *Eperua falcata*, forests 1439.
low temperature scanning electron microscopy 578.
mecopro biodegradation 2878.
mineralization, bogs, particle size, peat, nitrogen, nutrient levels 8697.
mineralization, nitrification, soil properties 8667.
mineralization, sulfur, nitrogen, nutrient cycles, soil 6996.
natural selection, reproductive strategy 2336.
nitrate mineralization, agricultural practices 8684.
nitrate reduction, temperature effects on 7839.
nitrification, ammonification, inhibition, carbon disulfide, 4-amino-1,2,4-triazole hydrochloride, 2-chloro-6-(trichloromethyl)-pyridine 9624.
nitrification, biomass, nitrogen sources, urea, fertilizer applications 5968.
nitrogen cycle, cellulose decomposition, prophan + mediotetrabactate effects on 7012.
nitrogen cycle, *Medicago sativa* saponins effects on, peat 2355.
nitrogen fixation, comparison Leguminosae 601.
nitrogen fixation, detection, urea, acetylene reduction 2373.
nitrogen uptake, competition, crops 599.
nutrient balance, soils (organic), forests 9514.
nutrient cycles, pollution effects, climatic change, carbon dioxide 9563.
nutrient cycles, succession, forests, montane environments 2297.
nutrient dynamics, trophic relations, forests, steppes 1448.
nutrient loss, respiration, measuring techniques, microcosms 571.
nutrient sources, nitrogen, phosphorus, plant communities, nival zone 4213.
olfactory stimuli, role habitat selection, *Carabidae* 9532.
organic compounds, soils (sandy), *Arachis hypogaea* shells composts effects on 5133.
organic matter decomposition, antibiotics effects on 5922.

Soil microorganisms, (continued)

organic matter decomposition, crop residues 2325.
 organic matter, decomposition, fertilizers effects on 5979.
 organic matter decomposition, C/N ratios, soil amendment, crop residues 5986.
 organic matter decomposition, tropical environment 4186.
 oxygen consumption, electron transport, measuring techniques 1494.
 paraffin hydrolysis, soil 155.
 pentachlorophenol effects on electron transport 2378.
 pesticide applications, chemical control, soil characteristics, carbofuran, fonofos 8705.
 pesticides biodegradation, mathematical models 161.
 pesticides, toxicity, *Azotobacter* 4253.
Phalaris aquatica decomposition, phosphorus macromolecules levels 573.
 phenol, biodegradation, chemical pollution 8420.
 phosphatase activity, soil physicochemical properties effects on 5089.
 phosphate, biomass, measuring techniques 567.
 N-(phosphonomethyl) glycine effects on, respiration, populations 620.
 phytotoxins production 2346.
 population dynamics, mounds, *Isoptera*, Kenya 8669.
 population dynamics, Saudi Arabia 2352.
 population levels, biomass, biological activity, tropical environment 7824.
 population levels, human impact trampling, forests 4133.
 population levels, leaf litter decomposition, forests 5855.
 population levels, slash and burn 9622.
 proteinase, urease, phosphatase, kinetics 2343.
 redox potential, enzymatic activity, soil amendment, manure, fertilizers, paddy fields, *Oryza sativa* 9623.
 respiration, biogeochemistry, nitrogen cycle, agricultural ecosystems 3221.
 respiration, biomass, petroleum sand 5916.
 respiration, decomposition, C/N ratios, straw 6966.
 respiration, nitrogen fixation, pollution effects, 2,4-D, pesticide residues 9621.
 respiration, *Parastacoidea* tasmanian burrows effects on, peatlands 7803.
 respiration, pesticides, herbicides, effects on 5908.
 respiration, seasonal variations, crop fields, soils (organic) 3191.
 respiration, seasonal variations, deserts 6964.
 respiration, soil moisture, soil temperature, pasture 3183.
 respiration, soil properties, remote sensing, tundra 5885.
 respiration, temperature effects on 3206.
 respiration, 2-methyl-4-chlorophenoxybutyric acid, disulfoton, effect on 5974.
 rhizobium japonicum, antagonists 576.
 role, organic matter formation 1491.
 salt marshes soil denitrification, factors affecting 2367.
 soil depth, environmental factors, relationship, *Verticillium dahliae* fungistasis 584.
 soil, freezing: drying effects on 579.
 soils (loam), biochemical characteristics, wetlands, pasture 2337.
 Spain, Ascomycetes, check lists 3202.
 species diversity, drying, forests, storage conditions 5856.
 sulfite conversion, *Picea* forests soil 6903.
 sulfoquinovose sulfur mineralization, forests soil, USA, North Carolina 6904.
 temperature adaptability, ecological evaluation 5895.
 temperature, humidity, effects on, carbon dioxide, production 577.
 termitaria mounds, community composition 5906.
Thamnostylus, new records, India 7794.
 thiosulphate sulphurtransferase activity, humus, forest floor 7777.
 Trifolium repens, *Rhizobium trifolii*, factors affecting competitiveness 611.
 tundra peat, freeze-thawing effects on 580.
 urea hydrolysis, aerobic conditions, anaerobic conditions 5109.
 urease activity, soil 616.
 variability, acid rain: cadmium, \pm zinc pollution effects 9509.
Soil moisture,
Arachis hypogaea, effects on contamination, *Aspergillus flavus*, aflatoxins 2988.
 association, clubroot pathogenicity, *Raphanus sativus* 6815.
 biodegradation, herbicides, molinate, soil types 5886.
 denitrification, mathematical models 5960.
 effects on disease resistance, *Medicago sativa*, wilt, *Fusarium oxysporum* f.sp. *medicaginis* 4097.
 effects on endomycorrhizas infection roots, *Juglans nigra* 6900.
 effects on enzymatic activity 4229.
 effects on growth, *Monosporascus* outpoides, infection, *Cucumis melo* 5758.
 effects on, *Plasmodiophora brassicae*, infection, *Brassica chinensis* 2216.
 effects on *Rhizobium japonicum* survival 2342.
 effects on *Rhizoctonia solani* infection, *Oryza sativa* seedlings 4965.
 effects on soil microorganisms, hydrocarbons gas production, anaerobic conditions 9567.
 hydrogen oxidation, hydrogenase 5917.
 irrigation, *Rhizobium japonicum* nitrogen fixation, yield, *Glycine max* 6993.
Pseudomonas solanacearum survival 9575.
 saprophytes, competition, suppression, antagonism, *Fusarium udum* 5694.
 soil characteristics, thermophilic microorganisms, dehydrogenase activity, plant communities, deserts 9559.
 soil microorganisms activity, deserts 8665.
 soil microorganisms, respiration, pasture 3183.
 tundra soil, human impact, motor vehicles, USA, Alaska 6951.
Soil nutrients,
 zinc deficiency, *Medicago sativa*, relationship infection, *Cylindrocarpum gracile*, *Fusarium roseum* 7658.
Soil pH,
 acidity, effects on *Trifolium repens*, \pm *Rhizobium trifolii* symbiosis, measuring techniques 4235.
 association, mycorrhizas inoculation, *Vaccinium corymbosum* 475.
 effects on *Corynebacterium* populations, relationship, *Fusarium oxysporum* f.sp. *apii*, yellows, *Apium graveolens* var. *duice* 5748.
 effects on growth, nodulation, *Alnus glutinosa* 555.
 effects on mycorrhizas, association *Adelges*, *Boreira reticulata* 1472.
 effects on pathogenicity, nutrient availability, *Gaeumannomyces graminis* var. *tritici*, take-all, *Triticum aestivum* 3013.
 effects on *Phytophthora cinnamomi* sporangia formation, zoospores release, infectivity, *Rhizodendron* 3994.
 effects on *Sclerotinia minor* sclerotia germination 4937.
 nitrous oxide reduction, soil properties, redox potential, soil pH 8703.
 phenendiphm mineralization, effects on 5928.
 saprophytes, competition, suppression, antagonism, *Fusarium udum* 5694.
 soil properties, nitrous oxide denitrification 8703.
Xanthomonas oryzae, wilt, *Oryza sativa* 8545.

Soil pollution,

heavy metals effects on ammonification, nitrification, nitrifying bacteria 4238.
 metals, association, tolerance, bacteria 6980.

Soil profiles,

vertical distribution, soil microorganisms 2350.

Soil properties,

ATP levels, measuring techniques 568.
 biodegradation, herbicides, molinate, soil types 5886.
 biodegradation, oil, waste disposal 7020.
 decomposition, soil chemistry mineralization 574.
 effects on growth, mycorrhizas, *Pseudotsuga menziesii*, *Tsuga heterophylla* 520.
 enterobacterin, effects on, soil microorganisms 4256.
 enzymatic activity, tundra 5884.
 forests, phosphorus mineralization, measuring techniques 521.
 fungistasis, rhizosphere, *Cajanus cajan*, *Lathyrus sativus* 558.
 grasslands, denitrification, fertilizer applications, denitrifying bacteria 8687.
 humus, pollution, effects on, lead, enzymatic activity, metabolism 2326.
 nitrate levels, seasonal variations, agricultural practices 8684.
 nitrate reduction, nitrogen cycle, measuring techniques 4231.
 recreation, environmental impact, forests 6892.
 redox potential, soil pH, nitrous oxide denitrification 8703.
 remote sensing, soil microorganisms, respiration, tundra 5885.
 respiration, diurnal variations, tropical environment, forests, pasture 1493.
 respiration, seasonal variations, grasslands, tropical environment 561.
Rhizobium japonicum, survival 557.
 seedlings, growth, mycorrhizas formation 522.
 sewage sludge, effects on, books, conferences 8188.
 soil microorganisms, community composition 8663.
 soil microorganisms, mineralization, nitrification 8667.
 tillage, effects on, microorganisms, biomass, carbon, nitrogen, mineralization 2359.
 Triticum, effects on rhizosphere microorganisms 7797.
 vesicular-arbuscular mycorrhizas, habitat, ecological distribution 570.

Soil salinity,

association, *Allium cepa* nutrient uptake, role, endomycorrhizas 7804.
 effects on enzymatic activity 4229.

Soil solarization,

integrated control, soil-borne diseases, *Rhizoctonia solani*, *Sclerotium rolfsii*, *Idiobasus* 7768.

Soil temperature,

actinorhizas, effects on nitrogen fixation, nodules, *Ceanothus velutinus* 9513.
Arachis hypogaea, effects on contamination, *Aspergillus flavus*, aflatoxins 2988.
 association, clubroot pathogenicity, *Raphanus sativus* 6815.
 denitrification, mathematical models 5960.
 effects on, root rot, *Phytophthora cinnamomi*, *Abies fraseri* 5872.
 Glycine max, effects on vesicular-arbuscular mycorrhizas 2332.
 permethrin biodegradation, soil microorganisms 9531.
 saprophytes, competition, suppression, antagonism, *Fusarium udum* 5694.
 soil microorganisms, respiration, pasture 3183.
 solar radiation, effects on, *Fusarium oxysporum* f.sp. *vasinfectum*, wilt, *Gossypium barbadense*, *Gossypium hirsutum*, yield 8606.
 vertical distribution, iron-oxidizing bacteria levels, reclaimed land, coal mines 9561.

Soil types,

biodegradation, herbicides, MCPB 5971.
 biodegradation, herbicides, soil properties, pathway 5886.
 phosphate adsorption, humus complex, actinomycetes, fungi, fertilization, agricultural land 9625.
 survival, *Pseudomonas solanacearum*, soil moisture 9575.

Soil-borne diseases,

agricultural practices, reviews 7648.
Beta vulgaris, bacter necrotic yellow vein virus vectors, *Polymyxa betae* ultrastructure 363.
 biological control, shellfish wastes, soil amendment, stimulation chitinolytic bacteria, *Gossypium hirsutum* 7769.
 Botrytis allii rot, inoculum persistence, *Allium cepa* 2220.
 control, *Rhizoctonia solani*, antifungal agents USA, association, manure applications 323.
 disease control, trees, silviculture 2317.
 disease resistance, genetic analysis, crop plants 6850.
 fungi, soil solar radiation effects on 7754.
Fusarium culmorum infection, *Triticum* seedlings, water potential effects on pathogenicity 1149.
Fusarium moniliforme, virulence, parasexual cycle 6854.
 inhibition, bark composts, plants 3122.
 integrated control, *Trichoderma harzianum* bulbs treatment, soil solarization, *Idiobasus* 7768.
 Macrophomina phaseolina, *Pythium aphanidermatum*, *Rhizoctonia solani*, pathogenicity, *Euphorbia lathyris* 5002.
 phytopathogenic fungi, disease resistance, genetic analysis, crop plants 6852.
 plant diseases, biological control 9472.
Pythium, *Gossypium hirsutum* seedlings 1266.
 Triticum aestivum, wheat mosaic virus vectors, *Polymyxa graminis* ultrastructure 363.

Soils,

denitrifying bacteria incidence, identification, *Hordeum vulgare* cultivation 6956.
Rhizobium inoculation, *Medicago sativa*, *Lotus corniculatus* nodulation 5128.
Soils (acid),
 forests, denitrification measurements 7844.
 nitrification, *Coniferales* forests, *Nitrobacter* 1446.
Oryza sativa yield, *Bacillus firmus* indole-3-acetic acid biosynthesis, India 4225.
Rhizobium japonicum antibiotic resistance isolates, *Glycine max* nodules 651.

Soils (acidic),

survival, *Rhizobium phaseoli* 3197.

Soils (loam),

biochemical characteristics, soil microorganisms, pasture, wetlands 2337.
 biochemical, biochemical characteristics 562.
 soil microorganisms, abattoirs, industrial effluents effects on 2381.
 sterilization, storage, effects on soil microorganisms, bacteria, respiration, nitrogen content 6977.
 Triticum, fertilizers (slow release) effects on, nitrification, uptake, yield 621.

Soils (organic),

copper soil amendment, bactericidal activity, *Escherichia coli* survival 8708.

Subject Index

Soils (organic), (continued)

- peroxidase activity, fungi, oxidation humic acids 5925.
 - pesticides effects on β -D-fructofuranosidase, α -amylase, ATP activity 3247.
 - soil microorganisms, nutrient balance, forests 9514.
 - soil microorganisms respiration, crop fields, seasonal variations 3191
- Soils (podzolic),**
- Actinomyces, distribution, USSR 1492.
 - effects on, *Phytophthora cinnamomi*, zoospores, pathogenesis, dieback, *Banksia grandis* 5850.

Soils (saline),

- India, *Azospirillum nitrogen fixation* 7840.
- Medicago sativa, nutrient uptake, *Rhizobium meliloti* inoculation effects on 7842.
- soil microorganisms, community composition, soil chemistry 7819.

Soils (sandy),

- organic compounds, *Arachis hypogaea* shells composts effects on soil microorganisms 5133.
- septic tanks association, survival, *Salmonella adelaide*, coliforms 1693.

Soils (sodic),

- soil microorganisms degradation, melanins, fungi 2335.

Soils (volcanic),

- carbon biodegradation, soil microorganisms 159.

Solanaceae,

- host range, Hungarian *Datura innoxia* mosaic virus infection 3077.
- wilt, *Pseudomonas solanacearum* infection, host range 2232.

Solanum,

- potato virus, etiology, purification, characterization 3071.
 - Pseudomonas solanacearum* infection, disease resistance 2269.
- Solanum gourlayi,**
- \times *Solanum tuberosum*, disease resistance, potato virus M 2247.

Solanum melongena,

- callus culture, *Mycoplasma* infection 1302.
- carlavirus infection, host range 408.
- cultivars comparison, disease resistance, *Verrucillium dahliae* wilt 6853.
- grey mold, *Botrytis cinerea*, dicarboximides resistance, greenhouses 6884.
- isolates, tomato bushy stunt virus like viruses, identification 8588.
- mixed infection, *Meloidogyne incognita*-*Rhizoctonia bataticola*, effects on growth 4992.

- pepper vein mottle virus infection, characterization 2159.

- root rot, fungicides disease control 6872.

- tobacco mosaic virus infection, magnesium effects on susceptibility 3033.

- + *Verrucillium dahliae* infection, plant extracts, antifungal activity.

- + *Cladosporium cucumerinum* 6877.

- biological control, wilt, *Pseudomonas solanacearum* infection, yield 476.

- wilt, *Verrucillium dahliae*, biological control, *Talaromyces flavus* 1390.

Solanum phureja,

- disease resistance, *Pseudomonas solanacearum* infection, temperature effects on 434.

Solanum terrestris,

- association *Hydrophaga macrophylla*, tomato spotted wilt virus detection 5016.

Solanum tuberosum,

- agglutinins, hypersensitive response, wilt, *Pseudomonas solanacearum* 3127.
- aging, leaves, tubers, potato virus M levels 7693.
- Aphididae disease transmission, potato virus Y, potato virus X, potato virus S, potato leaf roll virus, USA 6814.

- biological control, wilt, *Pseudomonas solanacearum*, disease resistance 5833.

- black leg, characterization 2153.

- blight, detection, aerial photography, I.R. radiation 1252.

- blight, *Phytophthora infestans*, epidemiology, inoculum potential 424.

- chemical control, *Phytophthora infestans*, metalaxyl, analogs 2288.

- corky ringspot, disease control 3112.

- cultivars, potato virus X eradication use, ribavirin 1239.

- cultivars, potato virus X infection, incidence 9406.

- degradation, use, *Penicillium digitatum* pectinolytic enzymes 1866.

- disease resistance genes, potato virus X 3119.

- disease resistance, infection, *Fusarium sulphureum*, *Phoma exigua* var. *foveata* 5810.

- disease resistance, late blight, *Phytophthora infestans*, adaptability 8621.

- disease resistance, *Verrucillium dahliae*, bioassays, detection, tissues 9083.

- early blight, *Alternaria solani*, biological control, *Streptomyces longisporus* antagonism 4105.

- epidemiology, blight, *Phytophthora infestans* 6821.

- field trials, *Phytophthora infestans*, disease spread, mathematical models 8593.

- foliage, chlorothaloniol residues, mathematical models, fungi 5819.

- gangrene, *Phytophthora infestans*, *Phoma exigua* var. *foveata* 9446.

- gangrene, *Phoma exigua* var. *foveata*, epidemiology 6827.

- growth, yield, rhizosphere bacteria effects on 6937.

- hypersensitive response, role, disease resistance, *Phytophthora infestans* 3144.

- infection, potato virus S, potato virus X, detection, use, enzyme-linked immunosorbent assay 1242.

- infection, potato virus X, potato virus Y, eradication, heat treatments, meristem tip culture use 2155.

- infection, viruses, disease spread, *Aphididae* 2181.

- infectivity, *Rhizoctonia solani*, *Rhizoctonia cerealis* 9367.

- isolation, tobacco streak virus, host range 2197.

- late blight, epidemics, Africa, East 420.

- late blight, epidemics, USA, Washington 1267.

- late blight, fungicides, disease control 1388.

- late blight, *Phytophthora infestans*, disease spread, mathematical models 9381.

- late blight, *Phytophthora infestans*, fungicides, applications 4106.

- late blight, *Phytophthora infestans*, fungicides resistance, in vitro, measuring techniques 7891.

- late blight, *Phytophthora infestans*, prediction, use, disease resistance, weather, effects on, fungicides 8622.

- leaf blotch, *Botrytis cinerea* 2213.

- leaf-roll, etiology, beet western yellows virus 5796.

- leaves age, disease transmission, potato leaf roll virus, *Myzus persicae* 2182.

- leaves, *Beauveria bassiana* conidia foliar application, pathogenicity *Leptotarsa decemlineata*, bioassays, biological control 7482.

- leaves, *Verrucillium albo-atrum* infection, pathology, hypersensitive response 3086.

- membrane potential, *Phytophthora infestans* cell walls extracts effects on 3053.

- metalaxyl resistance *Phytophthora infestans* incidence, infectivity, Israel 6798.

- nucleic acids metabolism, potato virus X infection effects on 2187.

- nutritional status, *Phytophthora infestans* infection, sporulation 6801.

- pesticide residues, chlorothaloniol deposition, mathematical models 1407.

Solanum tuberosum, (continued)

- pesticide residues, chlorothaloniol deposition, mathematical models 1408.

- Phytophthora infestans* blight, disease control, metalaxyl 9494.

- Phytophthora infestans* infection, leaves susceptibility 1228.

- Phytophthora infestans* infection, metalaxyl resistance, Netherlands 6795.

- Phytophthora infestans* infection, metalaxyl sensitivity 504.

- post-harvest decay, *Erwinia chrysanthemi*, storage effects on disease resistance 7721.

- potato leaf roll virus infection, 2,4-dioxohexahydro-1,3,5-triazine+guanidine antiviral activity 6886.

- potato leaf roll virus infectivity, refrigeration, freezing effects on 9422.

- potato leaf roll virus, inoculation, time, effects on, pathogenesis 3084.

- potato spindle tuber viroid infection, epidemiology, Australia 5781.

- potato virus S infection, Canada 4017.

- potato virus S infection, disease spread, detection 2158.

- potato virus X, potato virus S, infection, ribavirin, treatment 8581.

- potato virus Y infection, disease spread, control, use, minerals oils sprays 1243.

- protoplasts, response, *Phytophthora infestans*, hyphae, cell walls, components 3098.

- Pseudomonas solanacearum* infection, factors affecting disease resistance 3107.

- Rhizobacterium*, inoculation, effects on, *Erwinia carotovora*, infectivity 3061.

- Rhizoctonia solani* infection, antagonism 9429.

- Rhizoctonia solani* infection, factors affecting disease spread 6789.

- rhizosphere microorganisms, wilt, *Verrucillium albo-atrum*, *Solanum tuberosum*, insecticides effects on 1512.

- \times *Solanum gourlayi*, disease resistance, potato virus M 2247.

- stem canker, black scurf, *Rhizoctonia solani*, disease control, iprodione, benodanil, thiazendazole 5055.

- storage conditions, effects on, *Alternaria solani*, infection 4007.

- susceptibility, rot, *Erwinia carotovora* subsp. *carotovora*, temperature, wound healing 3062.

- temperature, relative humidity, effects on, *Alternaria solani*, infection, wound healing 4003.

- tobacco streak virus isolation, characterization, host range 1290.

- transmission (seed), Andean potato latent virus, potato virus T, arracacha virus B, tobacco ringspot virus, symptoms 406.

- tubers, hypersensitive response, sesquiterpenoids, alkaloids, *Phytophthora infestans* 3089.

- tubers, incidence, potato virus Y, potato leaf roll virus, USA 1245.

- tubers, infection, potato mop-top virus 2173.

- tubers, isoprenoids isolation, *Phoma exigua* var. *foveata* infection 3974.

- tubers, metalaxyl accumulation, antifungal activity, *Phytophthora infestans* 9495.

- tubers, phytoalexins induction, arachidonic acid, infection, *Phytophthora infestans* 428.

- tubers, potato leaf roll virus detection, enzyme-linked immunosorbent assay 9404.

- tubers, sesquiterpenes induction, alternaria acid, *Alternaria solani* 5051.

- tubers, soft rot 5752.

- tubers, soft rot, *Erwinia* 6809.

- tubers, tobacco rattle virus, detection, enzyme-linked immunosorbent assay, hybridization analysis 6808.

- tubers ultrastructure, *Phytophthora infestans* mycelia lipoglycoproteins effects on 2257.

- wart disease, epidemiology, pathogenesis, *Synchytrium endobioticum* 8535.

- wilt, rhizosphere microorganisms, *Solanum tuberosum*, insecticides effects on 1246.

- wilt, *Verrucillium dahliae*, proteins lipopolysaccharides complex characterization 1246.

- yield, blight, *Phytophthora infestans*, effects on 6822.

- yield, ring rot+potato virus S, potato virus X, infection, effects on 1230.

Solanum tuberosum subsp. andigena,

- disease resistance, rot, *Erwinia chrysanthemi* 3132.

Solar eclipses,

- Rhizobium*, *Azotobacter*, effects on nitrogen cycle 2370.

Solar radiation,

- effects on Leguminosae, *Rhizobium nitrogen fixation*, growth 5115.

- fungi viability, plants pathogens, solar radiation 4919.

- soil, effects on soil-borne diseases, fungi 7754.

- soil, temperature, effects on, *Fusarium oxysporum* f.sp. *vasinfectum*, wilt, *Gossypium barbadense*, *Gossypium hirsutum*, yield 8606.

Solenopsis invicta,

- pest control, reproduction inhibition, avermectin 1964.

Solid phase methods,

- bacteria suspension culture density 4501.

- enzyme immunoassay, *Staphylococcus aureus* protein A, urine albumin 5397.

- immunoassays, use, detection, hepatitis B surface antigen antibodies 4470.

- radioimmunoassay, detection, *Mycoplasma pneumoniae* antibodies 9870.

- radioimmunoassay, hepatitis B surface antigen, factors affecting 821.

- radioimmunoassay, soybean mosaic virus detection, Glycine max seeds 5368.

Solid wastes,

- activated sludge, methanogenesis, digestion (anaerobic) 1692.

- composting, urban environments, biological activity effects on microflora evolution 8942.

- digestion (anaerobic), technology, reviews 9801.

- food processing, soil microorganisms decomposition, land disposal, reviews 5981.

- land disposal, soil microorganisms decomposition, reviews 5976.

- sulfur oxidation, microorganisms 3471.

Solid-phase methods,

- fermentation, fungi cultures, sawdust, straw 8444.

Solubility,

- oxytetracycline, crystals 1636.

Solubilization,

- methodology, yeasts, β -D-galactosidase release 103.

- uranium, *Thiobacillus ferrooxidans* 7864.

Solutes,

- uptake, *Escherichia coli*, association, growth, measuring techniques equipment 9885.

Solvents,

- hydrocarbons, *Pseudomonas* 9632.

- production, *Clostridium beijerinckii*, continuous culture 9215.

- spectrophotometry, methodology, viruses, proteins 8108.

Somalia,

- Zea mays downy mildew, *Sclerospora sorghi* infection 381.

Sonax,

- antifungal activity, oranges green mold, comparison, thiabendazole, sodium orthophenylphenate 1319.

- Sonchus oleraceus**,
phloem, beet yellow stunt virus detection, pathogenesis 4036.
- Sonication**,
activated sludge, effects on particles size 1702.
- Escherichia coli**, enterotoxins, enzyme-linked immunosorbent assay 2961.
- Sooty bark**,
Cryptostroma corticale, virulence, Acer pseudoplatanus 6931.
- Sooty blotch**,
Gloeodes pomigena, orchards, Malus 6874.
- Sophora**,
extracts, antimicrobial activity 2495.
- Sophora secundiflora**,
seedlings growth, phosphorus uptake, mycorrhizas effects on 583.
- Sorbates**,
meat products preservation, reviews 4873.
- Sorbic acid**,
antibacterial activity, antifungal activity, pH 7065.
antimicrobial activity, meat 4810.
inhibition, trimethylamine-N-oxide reductase, Escherichia coli 269.
± monolaurin, antiviral activity 700.
use preservatives, wine, formation off flavor 7612.
yeasts sensitivity 7093.
- Sorbitol**,
chewing gum, dental plaque prevention, man 817.
- Sorghastrum nutans**,
leafspot 1174.
- Sorghum**,
Drechlera sorghicola leafspot, etiology, pathogenicity 9354.
stored products, post-harvest decay, fungi, effects on growth Insecta 5799.
+ Zea mays crop rotation, effects on maize chlorotic mottle virus incidence 2116.
- Sorghum bicolor**,
ethanol fermentation, yeasts 4735.
fungi infection, plant protection, coatings, waxes, plastics 4071.
inoculation, maize dwarf mosaic virus, spraying pressure effects on pathogenicity 6774.
leaves, use, Peronosclerospora sorghi types differentiation 3936.
maize dwarf mosaic virus infection, pathogenesis 5724.
mycotoxins contamination 6703.
pathology, root rot, stalk rot, Fusarium moniliforme 8560.
rhizosphere, nitrogen fixation, nitrogen-fixing bacteria 9612.
roots, nutrient uptake, role, Azospirillum brasilense 6988.
seedlings roots, carbon compounds exudates, nitrogen-fixing bacteria inoculation 4243.
seedlings, susceptibility, maize dwarf mosaic virus 6747.
sheath blight, Rhizoctonia solani, virulence 1193.
stalks, roots, fungi colonization 5715.
yield, rhizosphere, nitrogen fixation, Azospirillum brasilense, Azotobacter chroococcum 1500.
- Sorghum halepense**,
Zea mays, maize dwarf mosaic virus transmission 4971.
phytotoxicity, monocerin, Exserohilum turcicum 3959.
- Sorghum nitidum**,
susceptibility, downy mildew, Peronosclerospora sorghi 5700.
- Sorghum vulgare**,
association, pollen, Colletotrichum graminicola infection 3940.
disease resistance, leafspot, leaf rust, sheath blight 1366.
downy mildew, Peronosclerospora, Sclerospora graminicola, epidemiology, reviews 1186.
Glomus fasciculatus symbiosis, light effects on 2331.
pathology, Alternaria, Fusarium, infection, ergosterol 5720.
phytosphere, nitrogen-fixing bacteria, nitrogen fixation 9590.
plant breeding, disease resistance, downy mildew, Peronosclerospora sorghi 4061.
roots, plasma membranes, ultrastructure, Periconia circinata phytotoxins effects on 9345.
- Sour cherry necrotic ring spot virus**,
physicochemical properties, infection, crops 2144.
- Sour rot**,
Citrus limon, factors affecting, susceptibility, Geotrichum candidum 2146.
lemons, post-harvest decay, disease control, OGA-64251 1322.
- Sourdough**,
starter cultures, lactic acid bacteria, acid production 5620.
- South Africa Rep.**,
plains, microorganisms populations 4217.
- Southern bean mosaic virus**,
characterization, variability, Phaseolus vulgaris infection 333.
detection methodology, plant cells 4473.
disease transmission, Epilachna varivestis, Cerotoma trifurcata, feeding, regurgitation, Phaseolus vulgaris 6738.
Phaseolus vulgaris, Brazil 2098.
transmission, Vigna unguiculata, role, Coleoptera regurgitation factors 6733.
- Sowbane mosaic virus**,
infection, Atriplex subserbata, pathogenesis 3074.
- Soy sauce**,
fermentation, Aspergillus sojae taxonomic significance 115.
starter cultures, Pediococcus halophilus, organic acids metabolism 1054.
- Soybean crinkle leaf virus**,
infection, Glycine max, disease transmission vectors, Bemisia tabaci 5672.
- Soybean milk**,
Bacillus stearothermophilus spores, heat inactivation 207.
cheese production, lactic acid bacteria, ripening, organoleptic properties 3823.
+ corn, Salmonella senftenberg, decontamination, use, microwave radiation 3839.
fermentation, lactic acid bacteria, starter cultures 216.
starter cultures, lactic acid bacteria, sugar fermentation 6674.
whey, carbon sources, Propionibacterium freudenreichii subsp. shermanii, cyanocobalamin production 5565.
- Soybean mosaic virus**,
detection, Glycine max seeds, solid phase methods, radioimmunoassay 5368.
disease resistance, inheritance, Glycine max 9463.
disease resistance, inheritance, Phaseolus vulgaris 6855.
effects on, Glycine max, Glycine soja, nitrogen balance, nitrogen fixation 8533.
enhancement, bean pod mottle virus, infection, Glycine max 8541.
infection, comparison non-infected Glycine max, yield, competition 6740.
infection, cytology, Glycine max 4929.
infection, effects on roots volume, Glycine max 328.
infection, Glycine max, disease resistance 7733.
- Soybean mosaic virus, (continued)**
infection, Glycine max seeds, detection, enzyme-linked immunosorbent assay 343.
infection, pathogenicity, lesions, assays, use, Phaseolus vulgaris 8542.
seed-borne diseases, radioimmunoassay, Glycine max 1316.
strains, disease resistance, Glycine max 6839.
- Soybeans**,
proteins, + minced meat, spoilage, bacteria, temperature effects on 228.
- Space flight**,
food, relationship, Hansenula polymorpha carbohydrate composition, association, carbon dioxide recycling, nutrient requirements 8486.
- Spain**,
Macrophomina phaseolina charcoal rot, Helianthus annuus, incidence, distribution 9416.
soil microorganisms, Ascomycetes, check lists 3202.
- Sparassia crispae**,
burr rot, pathology, Coniferales 4179.
- Spartina alterniflora**,
nitrogen fixation, Campylobacter nitrofigilis sp. nov. 7856.
salt marshes, roots, localization, nitrogen-fixing bacteria 6987.
- Spathiphyllum**,
leafspot, Myrothecium roridum 5747.
- Spatial distribution**,
Botrytis fabae infection lesions, Vicia faba, statistical analysis methodology 2110.
carminomycins carbohydrate composition 1657.
Cylindrocapsidium crotalariae, soil inoculum, black rot, Arachis hypogaea 1123.
environmental factors, Cronartium ribicola, canker, Pinus monticola 4146.
fungi biomass, Pinus, forests 515.
soil microorganisms, forests, population studies, Tricholomopsis platyphylia 1445.
Tricholomopsis platyphylia, forests 1437.
- Speciation**,
Streptococcus, fecal microflora 6304.
- Species composition**,
bacteria, yeasts, atmosphere composition effects on, blood culture 9012.
Dictyostelia, ecological distribution, population density 5849.
Dictyostelium, ecological distribution, alpine environments 1479.
fungi, forests soil 3160.
fungi, population levels, leaf litter, forests, tropical environment 1443.
fungi, soil microorganisms, slash and burn 9622.
mycorrhizas, Eucalyptus 1440.
mycorrhizas, soil properties effects on, Pseudotsuga menziesii, Tsuga heterophylla 520.
- Species diversity**,
measurements methodology, bacteria cell culture, sampling, statistical analysis 870.
soil microorganisms, drying, forests, soil, storage conditions 5856.
- Speck**,
Lycopersicon esculentum, developmental stages effects on susceptibility, Pseudomonas syringae pv. tomato infection 2234.
Lycopersicon esculentum, disease resistance 1381.
Lycopersicon esculentum, scanning electron microscopy, pathology 2233.
Pseudomonas syringae pv. tomato, disease resistance, Lycopersicon esculentum 5049.
Pseudomonas syringae pv. tomato, disease resistance, plant breeding, Lycopersicon esculentum 6842.
Pseudomonas syringae pv. tomato, disease spread, environmental factors, Lycopersicon esculentum 1297.
Pseudomonas tomato, disease resistance, inheritance, Lycopersicon 5036.
- Speckled leaf blotch**,
disease control, Triticum aestivum, yield, mottles 7671.
Septoria, Triticum aestivum, incidence, distribution, USA, California 1171.
- Spectinomycin**,
analogs, production, antibacterial activity 6185.
antibacterial activity, Neisseria gonorrhoeae 4334.
antibiotic resistance, Francisella tularensis 8874.
antibiotic sensitivity testing, Neisseria gonorrhoeae 5240.
demethylation 1675.
Rhizobium japonicum antibiotic resistance isolates, Glycine max nodules 651.
rosaramycin, erythromycin, tetracycline, antibiotic sensitivity testing comparison, Mycoplasma pneumoniae 6092.
- Spectrofluorometry**,
computer applications, influenza virus, methodology 8107.
- Spectrometry**,
analysis, yeasts fermentation, phase variations 5433.
oxygen effects on methanogenesis, digestion (anaerobic), comparison, rumen 9629.
- Spectrophotometry**,
assays, tyrosine decarboxylase, Streptococcus faecalis 7345.
cephalexin, ampicillin 730.
detection, protons release, yeasts 2710.
I.R. radiation, counting methods, spores, fungi 3634.
localization, avenalumin, fungi, infected, leaves, Avena sativa 3912.
β-D-mannosidase, Bacillus subtilis 1901.
methodology, oleandomycin quantitation 6170.
nystatin 6178.
solvents, methanococcus, viruses, proteins 8108.
- Spectroscopy**,
Hypoxylon serpens, metabolites, 3-methoxy-4-methyl-5-prop-1-enylfuran-2(5H)-one 7497.
- Spegazzinia tressartha**,
pectin biodegradation 3776.
- Spergulin-15-phosphate**,
synthesis 3717.
- Spermine**,
biosynthesis, Acetobacter ornithine decarboxylase, GTP sensitivity 8371.
- Spermosphere**,
use, nitrogen-fixing bacteria, growth, enumeration, isolation, Oryza sativa rhizosphere 3616.
- Sphecoloma**,
isolation, scab, Citrus madurensis 1220.
relationship, Elsinore, pathogenicity, Euphorbiaceae 4979.
- Sphaeroplasts**,
Trichoderma reesei, formation, use lytic enzymes 6346.
- Sphaerotheca**,
disease resistance, plant breeding, Ribes nigrum × Ribes rubrum 1345.
- Sphaerotheca fuliginea**,
powdery mildew, biological control, Ampelomyces quisqualis hyperparasitism,

Sphaerotheca fuliginea, (continued)

- Cucumis sativus 2275.
Sphaerotheca fuliginea,
 = cucumber mosaic virus, infection, effects on, micronutrients, Cucumis melo 3076.
 downy mildew, Helianthus annuus 4006.
 infection, effects on, Cucumis sativus, leaves, carbohydrates, metabolism 1273.
 pathogenicity, Cucumis melo 1275.
 powdery mildew, Cucumis sativus, susceptibility, pathogenesis 3047.
 powdery mildew disease control, greenhouses plants, ectaconazole treatment 5004.
 sensitivity, fungicides, association ergosterol biosynthesis inhibition 9487.
Sphaerotheca macularia,
 powdery mildew, antifungal agents, disease control, Rubus idaeus 487.
 powdery mildew, Fragaria 5007.
Sphaerotheca mors-uvae,
 powdery mildew, Ribes nigrum, disease resistance 7748.
Sphaerotheca pannosa,
 powdery mildew disease control, greenhouses plants, ectaconazole treatment 5004.
Sphaerotheca pannosa var. roseae,
 powdery mildew, disease control, Rosa 9385.
Sphaerotilus,
 contamination, wells 3483.
Sphaerotilus natans,
 feeding patterns effects on glucose metabolism, relationship activated sludge 6247.
Spheroplasts,
 formation, imidazoles, antifungal activity, Candida albicans, scanning electron microscopy 3337.
 Mycobacterium smegmatis, isolation, methodology 856.
Spices,
 effects on Lactobacillus plantarum, fermentation, sausages 2056.
Spilocaea amelaninaria,
 New Zealand plants pathogens, new records 326.
Spinecia clareae,
 white rust, blue mold, disease control, malaxyl+chlorothalonil treatment 5064.
Spinach,
 spoilage, bacteria, nitrite formation 435.
Spinacia clareae,
 disease resistance, blue mold, Peronospora effusa, genetic analysis 1337.
 virulent mildew, Peronospora effusa, seed-borne diseases 9423.
Spirea vanhouttei,
 Erwinia amylovora amylovora host specificity 9371.
Spiramycin,
 disease control, dental plaque periodontal diseases, man 3505.
 effects on Escherichia coli aminoacyl-tRNA hydrolase, dissociation, ribosomes 1630.
 +metronidazole tablets, antibacterial activity, oral cavity isolates 8864.
Spiramycin I,
 biosynthesis, Streptomyces ambifaciens, radioactive labelling 6169.
Spirilloxanthin,
 configurations, Raman spectroscopy, carotenoproteins, Rhodospirillum rubrum 6625.
Spirillum lipoxanthum,
 relationship, nitrogen fixation, Hordeum rhizosphere, rhizoplane 4241.
Spirillum volutans,
 pollution monitoring, sewage treatment plants 3464.
Spiroplasma,
 growth inhibition test, use, taxonomy 2687.
 host-pathogen interactions, plants 5665.
 pathogenicity, Cocos nucifera, association yellows 3966.
 sensitivity, heavy metals salts 2441.
 stunt, enzyme-linked immunosorbent assay detection, Zea mays 3011.
Spiroplasma citri,
 brittle root, epidemiology, geographical distribution, Armoracia rusticana 3059.
 detection, enzyme-linked immunosorbent assay, Vinca rosea, Euscelidius variegatus 3046.
 disease transmission, host plants, feeding, Circulifer tenellus, vectors 4920.
 infection, Armoracia rusticana, pathology 9386.
 isolation, culture, plants, Circulifer tenellus, Scaphytopius nitridus 1769.
 mixed infection, X disease, mycoplasma-like organisms, etiology, Prunus 3025.
 plant diseases, disease transmission, Macrosteles fascifrons 6803.
Spirulina maxima,
 carbon sources, use digestion (anaerobic), methanogenesis 625.
Spodoptera,
 biological control, baculovirus 998.
Spodoptera eridania,
 growth, feeding, Medicago sativa, wilt, Verticillium albo-atrum, effects on 4943.
Spodoptera exigua,
 biological control, Bacillus thuringiensis 5559.
 larvae, Paecilomyces farinosus infectivity, field trials 7504.
Spodoptera frugiperda,
 biological control, Bacillus thuringiensis 5550.
 pest outbreaks, effects on alfalfa B1 contamination, Zea mays 4887.
Spodoptera littoralis,
 biological control, Bacillus thuringiensis 5559.
Spodoptera littoralis,
 biological control, Bacillus thuringiensis 9224.
 biological control, synergism, nuclear polyhedrosis virus + deltamethrin 9208.
Spoilage,
 Arachis hypogaea, seeds, Aspergillus parasiticus, Aspergillus oryzae 3802.
 Artocarpus lachucha fruits, Aspergillus niger, Drechslera rostrata 2238.
 Aspergillus, Rhizopus, effects on fatty acids, peanuts 4053.
 bacteria, food contamination, packaging, seafood 2935.
 bacteria, milk, pasteurization, refrigeration 2913.
 bacteria, minced meat + soybeans proteins, temperature effects on 228.
 bacteria, off flavor, milk 193.
 bacteria, spinach, nitrite formation 435.
 bacteria, water activity, frankfurters 6667.
 beef, Lactobacillus, films permeability, vacuum packaging 5635.
 beef, vacuum packaging, refrigeration, Enterobacteriaceae 5638.
 corn, fungi, contamination, mycotoxins, preservation 5643.
 corn, storage, association, mycotoxins production fungi 2069.
 fermented milk products, psychrotrophic bacteria, preservation, hydrogen peroxide + thiocyanic acid 6685.
 food contamination, bacteria, poultry, cooking, kitchens 1067.
 food contamination, lauricidin, preservatives, meat products 270.
 fruit juices, bacteria, bitterness, role limonin 7590.

Spoilage, (continued)

- fruits, nuts, microscopy, bibliographies 5034.
 fungi, meat products, vacuum packaging 4880.
 fungi, preservation, isobutyric acid, propionic acid, corn 5626.
 hay, fungi, prevention, antifungal agents 247.
 lactic acid bacteria, poultry, packaging food, carbon dioxide, oxygen 6666.
 Lactobacillus, Enterobacteriaceae, meat, vacuum packaging, carbon dioxide packaging 4879.
 Lactobacillus, frankfurters, pork, storage, gases composition 5639.
 luncheon meat, Bacillus, Streptococcus, shelf life 4872.
 luncheon meat, food contamination, Bacillus, micrococci, Streptococcus, factors affecting 2029.
 mayonnaise, Saccharomyces exiguus, Saccharomyces dairenensis 3812.
 meat, carbon dioxide inhibition Pseudomonas fluorescens, packaging association 7610.
 milk, off flavor, proteinase, bacteria 4815.
 milk products, yeasts, fungi, polyethylene packaging, oxygen permeability 4884.
 onions, beets, Enterobacteriaceae, Lactobacillus, vacuum packaging 4882.
 organoleptic evaluation, sweeteners, α -L-aspartyl-L-phenylalanine methyl ester, beverages 3803.
 poultry, packaging, cold storage 4881.
 proteolytic bacteria, food contamination, seafood 3825.
 psychrophilic bacteria, potatoes, vacuum packaging, nitrogen packaging 4883.
 seafood, bacteria, chlorotetracycline + sodium chloride treatment effects on 2922.
 seafood, bacteria, detection, ethanol levels 8458.
 seafood, carbon dioxide storage conditions effects on 2921.
 seafood, refrigeration, gases composition 5640.
 stored products, fungi 436.
 Vibrio, shellfish, vacuum packaging, lactic acid bacteria inoculation 8495.
 yeasts, coliforms, meat products, storage effects on taste panel evaluation 4771.
 yeasts, Staphylococcus aureus, psychrotrophic bacteria, organoleptic properties, refrigeration 2038.
Sporella officinalis,
 diterpene lactones, isoprenylquinone, antibacterial activity 8769.
Sporonchium pulverulentum,
 biomass production, pigs wastes 9102.
Sporangia,
 formation, Phytophthora cinnamomi, soil pH effects on 3994.
 survival, dieback, Phytophthora parasitica, pathology, Rhododendron 9386.
 Synchytrium endobioticum, isolation, methodology 8158.
Sporaricin A,
 derivatives biosynthesis, Saccharomyces hirsuta subsp. kobensis 4395.
 fluorene derivatives, synthesis 8876.
Sporaviridin,
 sugars component structure 8047.
Spore crystals,
 Bacillus sphaericus, toxicity, pest control, Culex quinquefasciatus 1035.
Spore germination,
 antifungal activity, fruits extracts, Diospyros cordifolia 8785.
 basidiomycetes, Cronartium flaccidum, association, Pinus nigra, Pinus sylvestris, leaves 4154.
 carbon dioxide, oxygen, soil aeration, Verticillium dahliae 6968.
 conidia, Cryphonectria cubensis, Eucalyptus phenols effects on, role, disease resistance, canker 5814.
 Conidiobolus obscurus resting spores, fungicides effects on 7762.
 fungi, iodolene, thiophanate methyl, effects on 7765.
 Fusarium oxysporum f.sp. vasinfectum, stimulation, prometryne, trifluralin, roots exudates, Gossypium hirsutum 8706.
 Glomus caledonius, amino acids stimulation 4189.
 Glomus epigaeum, Poncirus trifoliata x Citrus sinensis roots exudates effects on 1477.
 Gymnosporangium fuscum, basidiomycetes, haustoria, penetration, Vitis vinifera 1284.
 Hyphomyces, Quercus, Pinus, wood, extracts, inhibition 4180.
 Macrophompha phaseolina, fungi, fungicides, antibiotics, effects on 7760.
 Pinus radiata, monoterpenes, effects on, Dothistrona pini, needle blight 4143.
 Pseudoperonospora cubensis, downy mildew, Luffa acutangula, pollen, effects on 5011.
 Septoria nodorum, pathogenicity, host range, Triticum aestivum, Hordeum vulgare 3019.
 soil microorganisms, fungi, ammonia, volatiles, effects on 2349.
 Thermochaetomyces vulgaris, methodology, association carbon dioxide 5384.
 Trichoderma reesei, cellulolytic enzymes release 7331.
 Trichoderma reesei, indole-3-acetic acid, gibberellic acid, effects on 8320.
 Trichothecium roseum, fungicides effects on, in vitro 7764.
Spore traps,
 Sclerotinia sclerotiorum infection, Brassica napus, fungicides disease control 8634.
Spore-forming bacteria,
 contamination, milk, buffaloes 7578.
 contamination sources, milk 4812.
Spores,
 anaerobic bacteria, contamination, milk 4829.
 Aspergillus flavus, use, toxicity testing, aluminum, manganese 9076.
 Aspergillus niger, production, liquid culture fermenters 1809.
 Bacillus anthracis, Bacillus cereus, comparison, immunofluorescence methodology 9897.
 Bacillus anthracis, Bacillus cereus, counting methods, immunofluorescence 3573.
 Bacillus cereus, dimethyl sulfoxide, EDTA, effects on antibacterial activity, formaldehyde, hydrogen peroxide 8772.
 Bacillus cereus, germination, heat resistance, association, diarrhea, emetics, food contamination, man 193.
 Bacillus, ethylene oxide resistance 2412.
 Bacillus globigii, inactivation, microwave radiation, aerosols 9706.
 Bacillus megaterium, disulfide reductase isolation, purification, characterization 1878.
 Bacillus megaterium, heat resistance, chemicals resistance, association, phosphate media 3280.
 Bacillus, preservation, use, ethanol 2699.
 Bacillus, pressure isolation 5417.
 Bacillus sphaericus, spore crystals, toxicity, pest control, Culex quinquefasciatus 1035.
 Bacillus sphaericus, toxins, extraction 5662.
 Bacillus stearothermophilus, dipicolinic acid activation, counting methods 3612.
 Bacillus stearothermophilus, heat inactivation, soybean milk 207.
 Bacillus subtilis, bioassays, antimicrobial agents, urine 9708.

Spores, (continued)

- Bacillus subtilis*, resistance, glutaraldehyde, sodium hypochlorite, iodine 5177.
Bacillus thuringiensis, persistence, leaves, biological control, Lepidoptera 1006.
Bacillus thuringiensis, persistence, soil, biological control, Insecta 1007.
Bacillus thuringiensis subsp. israelensis, viability, toxicity, biological control, *Aedes aegypti* 4713.
Beauveria, biological control, eggs, larvae, *Epirixys* 985.
Botryodiplodia theobroma, vectors, *Mus musculus domesticus*, *Periplaneta americana*, *Zonoreus variegatus*, yams, post-harvest decay 442.
Botrytis cinerea, dispersal, incidence, *Phaseolus vulgaris* pod rot 5686.
Caulis crispis fimbriata, agglutination, extracts, *Ipomoea batatas*, roots, host specificity, black rot 3695.
Ceratocystis fimbriata, agglutination factors, isolation, characterization, *Coroasca esculenta* black rot 4993.
Clostridium botulinum inactivation, heat transfer, mushrooms, canning 1093.
Clostridium perfringens, extraction, sediments, methodology 1771.
Clostridium perfringens, media (selective) 892.
coat protein, fractionalation, characterization, *Dictyostelium discoideum* 1831.
Colletotrichum graminicola, *Helminthosporium maydis*, application, *Zea mays*, leaves, methodology, humidity 9081.
 +crystals formed, *Bacillus thuringiensis*, exotoxins effects on *Ostrinia nubilalis* 7489.
Cunninghamella elegans, pretreatment, stimulation 11-desoxy-17-hydroxycorticosterone hydroxylation 3704.
Deuteromycetes, production, biological control, *Culicidae* 1807.
Erysiphe graminis f.sp. *hordei*, dispersal, spring, *Hordeum vulgare*, Denmark 2127.
 fungi, counting methods, spectrophotometry, I.R. radiation 3634.
 germination, fungi, rhizosphere, *Cajanus cajan*, *Lathyrus sativus* 558.
 germination, *Puccinia melanocephala* leaf rust pathogens, *Saccharum officinale* 5716.
Glomus mosseae, *Vicia faba*, crop fields 3186.
 isolation, sterilizers, sampling, methodology 8802.
Pithomyces chartarum, sporidesmin purification methodology, high-pressure liquid chromatography 3813.
Pleurotus sajor-caju, packaging, sterilization 4516.
Pseudocercospora heliothricoides, rainfall dispersal, disease spread, eyespot, *Triticum aestivum* 5727.
Pseudocercospora heliothricoides, rainfall dispersal, isolation, soil 5921.
 quality, herbicides effects on, *Rhynchosporium secalis* infection, *Hordeum* 486.
 release, *Cladosporium carigenum*, scab, *Carya illinoensis*, factors affecting 397.
 release, *Peronospora tabacina*, disease spread, blue mold, wind, *Nicotiana tabacum* 4995.
 strip mines, soil amendment, effects on, vesicular-arbuscular mycorrhizas, mycorrhizas, association: *Agropyron trachycolum*, *Picea glauca* 1480.
 survival, environmental conditions, pest control, *Entomophthora*, biological control 1009.
Tilletia controversa, contamination, grain, *Triticum aestivum* 1329.
Sporidesmin, purification methodology, high-pressure liquid chromatography, *Pithomyces chartarum* spores 3813.
Sporidesmium sclerotium, media (culture), methodology, sporulation 6356.
Sporidesmoldes, toxicity, role superoxide radicals, formation, in vitro 274.
Sporidiobolus, enzymes, electrophoresis 7422.
Sporobolomyces, enzymes, electrophoresis 7422.
Sporocye, incidence, drinking water systems 1722.
Sporolactobacillus, isolation, food, methodology 7565.
Sporothrix schenckii, antifungal activity, amphotericin B, temperature effects on 1569.
 cell culture, formalin antitumor activity 8793.
 cell distribution, methodology 2724.
 polysaccharides, structure 1782.
Sporotrichum, single-cell protein production, crop residues, food industry, industrial wastes 9112.
Sporotrichum pulverulentum, biodegradation, *Canarium schweinfurthii*, bark 550.
 cellobiose oxidase, characterization 4602.
 lignin biodegradation 1998.
 lignin biodegradation, *Pinus*, straw 171.
 lignocellulose biodegradation, comparison *Dichomitus squaleus* 1999.
 lignosulfonates biodegradation, polycyclic acid effects on 6643.
 proteins, production, use, *Citrus*, wastes 9131.
Sporotrichum thermophile, production, endo-1,4- β -D-xylanase, cellulase, exo-cellobiohydrolase 8323.
Sporulation, *Aternaria helianthi*, survival, *Helianthus annuus* infection 7712.
Aspergillus flavus, *Aspergillus parasiticus*, aflatoxin B1, formation, rice 2946.
Bacillus brevis, intracellular serine proteinase association, purification, characterization 36.
Bacillus brevis, serine proteinase, biosynthesis 6545.
Bacillus licheniformis, relationship bacitracin biosynthesis 8865.
Bacillus subtilis, mutants, rifamycin, antibiotic resistance 7901.
Bacillus subtilis var. *niger*, factors affecting, resistance, ethylene oxide 9705.
Cercospora arachidicola, screening, leafspot disease resistance, *Arachis hypogaea* 5047.
Cercospora zeae-maydis, leafspot, pathogenesis, *Zea mays* 3957.
Erysiphe graminis, samplers 4518.
 fungicides effects on *Monilia fructicola* 2282.
 lactoferrin, transferin, interaction, nitrite, inhibition, *Bacillus cereus* 3329.
Monilia fructicola, overwintering, *Prunus persica*, fungicides effects on 4763.
 penicillium cyclopium, P-factor stimulation 3705.
Peronospora viticola, downy mildew, disease resistance, *Pisum sativum* cultivars 3141.
 Phytophthora, *Eucalyptus* forests soil extracts effects on 525.
 Phytophthora infestans, infection, nutritional status, *Solanum tuberosum* 6801.
 Saccharomyces, *Kluyveromyces*, erythromycin inhibition 1631.
 Spodopium sclerotivorum, media (culture), methodology 6356.
 Streptomyces griseus, liquid culture, induction, methodology 9042.
 Tranzschelia discolor, rust, host range, *Prunus domestica* subsp. *domestica*, *Prunus*

Sporulation, (continued)

- domestica* subsp. *insitita* 3967.
Spot, *Leandra momordica*, pathology, *Cucumis sativus* 5768.
Piper nigrum, *Xanthomonas campestris* pv. *vesicatoria*, disease control, association, copper sensitivity 6878.
Pseudomonas syringae pv. *syringae*, *Hordeum vulgare*, etiology 4970.
Pyrenophora teres f.sp. *maculata*, *Hordeum vulgare* 5703.
Pyrenophora tritici-repentis, *Triticum aestivum*, incidence, Colombia, Ecuador, Peru 9356.
 viruses, Gramineae, symptoms, vectors, biological properties 1163.
Xanthomonas campestris pv. *vesicatoria*, *Capsicum annuum* 7696.
Xanthomonas vesicatoria races, pathogenicity, *Capsicum annuum* 1309.
Sprays, adjuvants, biological control, nuclear polyhedrosis virus, pathogens, *Heliothis* 54.
 biological control, *Bacillus thuringiensis*, *Choristoneura fumiferana* 7488.
 biological control, *Bacillus thuringiensis*, *Choristoneura fumiferana* 8350.
 minerals oils, use, control, disease spread, potato virus Y infection, *Solanum tuberosum* 1243.
 nose, thimerosal preservatives, *Pseudomonas cepacia* survival 7118.
Spring, powdery mildew, *Hordeum vulgare*, spores dispersal, spring, Denmark 2127.
Sprouts, vegetables, bacteria microflora 8473.
Spur blight, *Odiumella applanata*, antifungal agents, disease control, *Rubus idaeus* 487.
Rubus idaeus, row width, role, disease control, USA, Ohio 7734.
Squalene monooxygenase (2,3-epoxidizing), biosynthesis, activity, oxygen role, *Saccharomyces cerevisiae* 8216.
Squash mosaic virus, infection, *Cucumis melo*, Africa 1237.
 seed-borne diseases, detection, enzyme-linked immunosorbent assay 7219.
Stability, levorin, time, association, storage 1654.
Stachybotrys atra, biological control, *Rhizoctonia bataticola* root rot, *Cicer arietinum* 7455.
 food contamination, incidence, British Isles 3878.
 toxicity, sheep, mycotoxins isolation, bedding straw 4897.
Stachybotrys chartarum, verrucaria J biosynthesis 5654.
Stagers, fungi, *Lolium*, propiconazole, antifungal activity 2481.
Lolium perenne neurotoxins, phytoalexins, response fungi infection 3955.
Stagonospora arenaria, leafspot, *Dactylis glomerata*, pathogenesis, visual perception, man 3101.
Stain, disease control, fungicides, wood, *Pinus* 5882.
 seeds, *Cercospora kikuchii*, *Glycine* max, new records, Pakistan 7662.
Staining, detection, *Chlamydia*, methodology 8123.
 fluorescence, detection, *Chlamydia trachomatis* 3619.
 fluorescence, fungi, ethidium bromide, methodology 2720.
 Legionella pneumonia, tissues 5377.
 methodology, adenovirus, immunofluorescence, tissue culture 9845.
 methodology, localization, hepatitis B surface antigen, liver, man 827.
Puccinia striiformis plant diseases, methodology 6730.
Stains, bacteria histology, scanning electron microscopy 866.
Stalk rot, *Diplodia maydis*, *Ostrinia nubilalis* infestation effects on, disease resistance, *Zea mays* 361.
Fusarium moniliforme, pathology, *Sorghum bicolor* 8560.
Fusarium moniliforme, *Zea mays*, predisposing factors 6754.
Gibberella zeae, *Fusarium graminearum*, relationship *Ostrinia nubilalis*, pests infestation, *Zea mays* 9349.
 Phytophthora megasperma f.sp. *glycinea*, metalaxyl, *Glycine* max 1420.
Zea mays, Brazil, *Erwinia chrysanthemi* pv. *zeae* 2141.
Zea mays, *Erwinia chrysanthemi*, symptoms 2140.
Zea mays, fertilizer applications effects on 1197.
Stalks, *Sorghum bicolor*, fungi colonization 5715.
Standardization, β -lactam antibiotics, assays 4380.
Standards, food contamination, microorganisms 3849.
 food contamination, sampling 212.
 milk, bacteria contamination 482.
 milk, bacteria contamination, organoleptic evaluation 4839.
Stands, *Acacia holosericea*, nutrient cycles association endomycorrhizas 535.
 biomass, nutrient cycles, mycorrhizas, fungi, *Pseudotsuga menziesii*, USA, Oregon 6905.
Stannous fluoride, effects on *Streptococcus mutans* growth, tin uptake, acid production, glucans production 8771.
 gels, dental caries prophylaxis, man 8987.
 mouthwashes, effects on *Streptococcus mutans* levels, dental plaque, saliva, man 3500.
Staphylococcus, detection, *Corynebacterium* bioassays 6224.
Staphylococcus, adherence, catheters 6271.
 antibacterial activity, bile acids, synergism, benzylpenicillin, furagin 1618.
 antibacterial activity, cefaclor, cefadroxil 731.
 antibacterial activity, ceftiozime, antibiotic synergism, aminoglycoside antibiotics 2531.
 antibacterial activity, dibekacin, comparison, tobramycin 2584.
 antibacterial activity, dimethyl sulfoxide \pm antibacterial agents 7919.
 antibacterial activity, macrolide antibiotics 8041.
 antibacterial activity, miconazole +imidazole derivatives antibiotic synergism 5182.
 antibacterial activity, *Neisseria gonorrhoeae* 6047.
 antibacterial activity, norfloxacin 7091.
 antibacterial activity, rifampicin +teichomycin, +vancomycin 3392.
 antibacterial activity,

Staphylococcus, (continued)

- 6- α -hydroxyethyl-2-acetoxymethyl-2-penam-3-carboxylate 1611.
- antibiotic antagonism, piperacillin + cefoperazone 3387.
- antibiotic resistance, aminoglycoside antibiotics, plasmids transfer 7042.
- antibiotic resistance, N-formimidoyl thiamycin 7041.
- antibiotic sensitivity testing 9726.
- antibiotic sensitivity testing, teichomycin, vancomycin 6202.
- antibiotics effects on ultrastructure 678.
- cell injury, association, novobiocin, coumestrol 5280.
- clinical isolates, antibacterial activity, sisomicin 3425.
- clinical isolates, antibiotic sensitivity testing 2522.
- clinical isolates, antibiotic sensitivity testing 8105.
- clinical isolates, antibiotic sensitivity testing 8804.
- clinical isolates, antibiotic sensitivity testing 9734.
- clinical isolates, susceptibility, antimicrobial agents 3281.
- coagulase negative, antibiotic sensitivity testing 7122.
- colonization, catheters, growth 2638.
- conjugation, plasmids, drug resistance, gentamicin 3273.
- contamination, toxigenicity, infants food 8464.
- detection, media (selective) methodology, association, food contamination 5416.
- enterotoxin A, detection, enzyme-linked immunosorbent assay, methodology 9309.
- enterotoxins biosynthesis 3886.
- enterotoxins biosynthesis, media (culture) 1115.
- enterotoxins, food contamination, detection, enzyme-linked immunosorbent assay 1110.
- enterotoxins, identification, counter immunoelectrophoresis, immunofluorescence 4918.
- enterotoxins production 2087.
- enterotoxins production 2959.
- fermentation, *Pentacetrha macrophyla* seeds 6675.
- food contamination, chickens eggs 187.
- food contamination, ice cream 7567.
- food contamination, indicators, endotoxins, deoxyribonuclease I, coagulase 3810.
- food contamination, milk products, India, incidence 2058.
- food contamination, ripening, salami 2030.
- fostomycin derivatives antibacterial activity 8890.
- fructose-bisphosphate aldolase, purification, characterization, amino acid composition 7388.
- infection, immunodiagnosis, teichoic acid, enzyme-linked immunosorbent assay, man 9919.
- interferon antibacterial activity 7922.
- α -interferon, antibacterial activity 686.
- isolation, goats, antibiotic resistance 8744.
- β -lactamase activity 973.
- mastitis, relationship udder hygiene, cattle 4453.
- media (selective) 873.
- methicillin antibiotic resistance, protein composition 655.
- methicillin resistance, antibacterial activity, antibiotic synergism, vancomycin \pm rifampicin 7126.
- norfloxacin antibacterial activity 8760.
- novobiocin antibacterial activity, pH effects on 6228.
- plasmids transfer aminoglycoside antibiotic resistance 7046.
- protein A, agglutination, assays, rotavirus 8105.
- protein composition, methicillin antibiotic resistance 2407.
- Skeletonema costatum*, comparison, *Phaeodactylum tricornutum*, extracts, antibacterial activity 7162.
- soaps contamination 2641.
- strains, polymyxin, susceptibility, association, coagulase 8866.
- synthetic detergents antimicrobial activity 7958.
- urinary tract clinical isolates, norfloxacin antibacterial activity 9671.

Staphylococcus albus,

- antibiotic sensitivity testing, teichomycin, vancomycin 6202.

Staphylococcus aureus

- 4-O-(2-acetamido-2-deoxy- β -D-glucopyranosyl)-D-ribitol biosynthesis 7434.
- Achaeta fulta, mucin, antibacterial activity 5185.
- addicts isolation, methicillin resistance, susceptibility strains, antibiotic sensitivity testing 3393.
- adenine, stimulation endonuclease, extracellular enzymes 7329.
- aminoglycoside antibiotics, antibiotic sensitivity testing 3378.
- aminoglycoside 2'-O-adenylyltransferase, 7-hydroxytropolone inhibition, association, antibiotic resistance 652.
- animal isolates, antibiotic resistance, heavy metals resistance 3279.
- M.K. 0366 antibacterial activity 6055.
- antibacterial activity, β -hydroxythioesters derivatives 8752.
- antibacterial activity, β -lactam antibiotics 4330.
- antibacterial activity, antibiotic M-92 3428.
- antibacterial activity, antibiotic synergism, vancomycin + gentamicin, vancomycin + tobramycin 771.
- antibacterial activity, antibiotic synergism, vancomycin \pm gentamicin \pm rifampicin 7126.
- antibacterial activity, antibiotics + ethionium 1558.
- antibacterial activity, carbazole derivatives 7961.
- antibacterial activity, cefonicid, ceforanide, cefazolin 7995.
- antibacterial activity, cefoperazone \pm mezlocillin 6146.
- antibacterial activity, cephalosporins derivatives, structure-activity relationships 8839.
- antibacterial activity, Cephalosporins derivatives, structure-activity relationships 8840.
- antibacterial activity, derivatives, kanamycin, dibekacin, ribostamycin 8853.
- antibacterial activity, diterpenoids, *Stochospermum marginatum* 3315.
- antibacterial activity, fostomycin 7184.
- antibacterial activity, halogenoforic compounds 2438.
- antibacterial activity, *Helichrysum plicatum* extracts 2443.
- antibacterial activity, *Micromonospora verruculosa* antibiotic M-92 6194.
- antibacterial activity, N,N-bis(alkylmethyl)-1,2-ethanediamine dioxides, N,N-bis(alkylmethyl)-1,2-propanediamine dioxides, structure-activity relationships 7954.
- antibacterial activity, N,N-bis(decylmethyl)- α , ω -alkanediamine dioxides 7116.
- antibacterial activity, N-formimidoyl thiamycin + amikacin 1680.
- antibacterial activity, N-(2-hydroxypropyl)-methacrylamide copolymers synthesis 7913.
- antibacterial activity, pharmaceuticals 8753.
- antibacterial activity, piperacillin 9757.
- antibacterial activity, polyethylene glycol 8774.
- antibacterial activity, shikinin- β , β -dimethylacrylate, Alkanna

Staphylococcus aureus, (continued)

- hirsutissima 7081.
- antibacterial activity, silver nylon fabrics 3371.
- antibacterial activity, sorbic acid, pH 7065.
- antibacterial activity, *Streptomyces melanosporus* antibiotic DC-52 8344.
- antibacterial activity, synthetic gramine 8884.
- antibacterial activity, teichomycin 7183.
- antibacterial activity, teichomycin comparison, vancomycin 8899.
- antibacterial activity, 3-acetyl-4-hydroxy-6-methyl-2H-thiopyran-2-ones, 3-acetyl-4-methoxy-6-methyl-2H-thiopyran-2-ones, bromination, derivatives 2493.
- antibacterial activity, 3-aryl-2-arylimino-4,5-disubstituted- Δ^4 -thiazolones 4318.
- antibacterial agents, quinazolinones 5186.
- antibiotic antagonism, nafcillin + rifampin, oxacillin + rifampin, antibacterial activity 750.
- antibiotic L-640,876 antibacterial activity, mechanisms, membrane permeability 4409.
- antibiotic resistance, cephalosporins 7035.
- antibiotic resistance, clinical isolates 3296.
- antibiotic resistance, epidemiology 9647.
- antibiotic resistance, macrolide antibiotics 9646.
- antibiotic resistance mechanisms, β -lactam antibiotics 3268.
- antibiotic resistance, methicillin 3267.
- antibiotic resistance, methicillin 3403.
- antibiotic resistance, methicillin, nosocomial environments 3301.
- antibiotic resistance, penicillins, erythromycin 3290.
- antibiotic resistance, plasmids transfer, relationship phage typing 8721.
- antibiotic resistance, septicemia, man 645.
- antibiotic sensitivity testing 6111.
- antibiotic sensitivity testing 7072.
- antibiotic sensitivity testing, β -lactam antibiotics 7978.
- antibiotic sensitivity testing, antimicrobial agents 5233.
- antibiotic sensitivity testing, ceftazidime, agar diffusion test 4371.
- antibiotic sensitivity testing methodology 4381.
- antibiotic sensitivity testing, teichomycin, vancomycin 6202.
- antibiotic tolerance, methicillin, cloxacillin 5250.
- antibiotic tolerance, oxacillin, pH effects on 3408.
- antibiotic VA-2, antibacterial activity, effects on 6213.
- antibiotics, antibacterial activity 8819.
- antimicrobial activity, *Acorus calamus* essential oils, sophora extracts 2495.
- antimicrobial activity, butylated hydroxyanisole, t-butylated hydroxyquinone, propyl gallate 4319.
- antimicrobial activity, daunomycin, adriamycin, ascorbic acid, dimethyl sulfoxide, effects on 8033.
- antimicrobial activity, iron, cobalt, copper 2497.
- antimicrobial activity, *Myxococcus coralloides* pigments 9667.
- antimicrobial activity, O,O-dialkylthiophosphoric acid.
- O,O-dialkylthiophosphoric acid, derivatives 7955.
- antimicrobial activity, pectinase 8910.
- bactericidal activity, cefadroxil, cephalexin 7137.
- bile acids resistance association antibiotics sensitivity 2406.
- bioassays indicator species, drug sensitivity testing 6039.
- cefodizime antibacterial activity 7142.
- cefotaxime, moxalactam, antibacterial activity comparison, antimicrobial agents 6126.
- cefotetan antibacterial activity 5198.
- cefuroxim, antibacterial activity 1612.
- cell surface, detection L-cysteic acid, methionine sulfoxide, β -alanine, dityrosine, α -aminobutyric acid 1834.
- cell walls, binding, opsonins, immunoglobulins, immunofluorescence 8122.
- cell walls, phospholipids content, antibiotics effects on 3380.
- cell walls, sanguinrin effects on 8873.
- cephalosporins antibacterial activity 5160.
- clinical isolates, antibacterial activity, cefoxitin, tobramycin, comparison N-formimidoyl thiamycin 7076.
- clinical isolates, antibacterial activity, ceftazidime, cefotaxime, moxalactam 4365.
- clinical isolates, antibacterial activity, cephalosporins 9740.
- clinical isolates, antibacterial activity, cephalosporins 9740.
- clinical isolates, antibacterial activity, cephotaxim, cephuroxim 8830.
- clinical isolates, antibacterial activity, gentamicin, tobramycin, netilmicin, media analysis 7074.
- clinical isolates, antibiotic resistance, oxytetracycline, minocycline 3288.
- clinical isolates, antibiotic sensitivity testing 3369.
- clinical isolates, antibiotic sensitivity testing 7132.
- clinical isolates, biochemical characteristics, antibiotics sensitivity 8827.
- clinical isolates, food isolates, enterotoxins production 1113.
- clinical isolates, hospitals, drug resistance, mercury 662.
- clinical isolates, plasmids, role, antibiotic resistance, Australia 7029.
- clinical isolates, susceptibility, antimicrobial agents 3281.
- coagulase biosynthesis defective mutant, isolation methodology 9040.
- crabapple antibacterial activity, microflora 5181.
- conjugation, plasmids, drug resistance, gentamicin 3273.
- contamination, goats meat, frozen foods 5606.
- deoxyribonuclease, assays, false-negatives 1076.
- deoxyribonuclease detection, heat stability, food contamination 9278.
- detection, media (selective) methodology, association, food contamination 5416.
- DNA, isolation, methodology 8121.
- Eire hospitals isolates, antibiotic resistance, gentamicin, methicillin, plasmids, role 7032.
- electron transport system, antibacterial activity, butylated hydroxyanisole 6050.
- encapsulation, cow's milk, cross-reactivity 7577.
- endonuclease, calcium deoxynucleotides inhibitors complex, conformation, N.M.R. 7395.
- enterotoxigenicity, poultry isolates 206.
- enterotoxin B, biosynthesis, culture methodology, purification 2963.
- enterotoxin B, transport, processing 2081.
- enterotoxin C, radioimmunoassay solid phase methods 9295.
- enterotoxin F, purification, characterization 4905.
- enterotoxin F, purification, characterization 9297.
- enterotoxins, biosynthesis, chickens 6727.
- enterotoxins, detection, enzyme-linked immunosorbent assay, immunodiffusion 6710.
- enterotoxins, enzyme-linked immunosorbent assay, milk 1109.
- enterotoxins, purification, physicochemical properties 7644.
- enterotoxins production, growth, sandwiches, packaging 1091.
- enterotoxins, purification, physicochemical properties 7644.
- enterotoxins, reviews 6723.

Staphylococcus aureus, (continued)

enterotoxins, toxigenicity 7631.
 enumeration, meat products 1083.
 exotoxins, isoelectric focusing 7659.
 R factor RPAI, aminoglycoside acetyltransferase, aminoglycoside phosphotransferase, kinetics, mechanisms 8271.
 R factors, antibiotic resistance, drug resistance 2403.
 food contamination, cheese 8487.
 food contamination, cheese, enumeration, survival 4797.
 food contamination, enumeration equipment 3575.
 food contamination, ice cream 6659.
 food contamination, liquids egg production 203.
 food contamination, meat, phage typing 2920.
 food contamination, pork, cooking, kitchens 1066.
 food contamination, seafood, food processing, L-form, cell fusion, recombinants, antibiotic resistance 3286.
 N-formimidoyl thienamycin, antibacterial activity 773.
 fructose-bisphosphate aldolase active sites, amino acid sequence 961.
 D-galactose-6-phosphate isomerase, purification, characterization 4653.
 gentamicin antibiotic resistance, conjugate plasmids analysis 8738.
 gentamicin resistance, aminoglycoside antibiotics susceptibility 2413.
 gentamicin resistance, mechanisms 7026.
 gentamicin susceptibility enhancement, role, N,N-dicyclohexylcarbodiimide, nigericin 8954.
 growth, contamination, beef, packaging 272.
 growth, enterotoxins biosynthesis, sodium chloride, potassium chloride, ripening, cheddar cheese 2037.
 growth, food additives effects on 8469.
 growth, food, mathematical models, water activity 8468.
 growth, mayonnaise, meat, refrigeration 229.
 growth, sugar inhibition, association, wound infection treatment, man, in vitro 7056.
 growth, water activity, media solutes 864.
 heat resistance, sodium chloride, eggs effects on 4848.
 histology stains, scanning electron microscopy 866.
 identification 3564.
 identification, clumping 6324.
 identification, fibrinogen hemagglutination use 844.
 identification, latex agglutination methodology 7235.
 identification methodology 9960.
 isolates, hospitals, antibiotic resistance 8732.
 isolates, milk, enterotoxins toxigenicity 8716.
 isolation, characterization, abscesses, pigs carcasses 5619.
 isolation, milk, meat 3826.
 isolation, nasopharynx, medical personnel, operating theaters, hospitals, antibiotic resistance, antibiotic sensitivity testing 8980.
 β -lactam antibiotics, antibiotic resistance, temperature effects on 3282.
 β -lactamase, antibiotic tolerance, β -lactam antibiotics, screening 637.
 β -lactamase, guanidine hydrochloride, bioguanide hydrochloride derivatives denaturation 3702.
 β -lactamase inhibition, iodopenicillanate, bromopenicillanate 3404.
 lactic acid biosynthesis 8206.
 liquid culture, media (selective) 1801.
 lysis, albumin lysozyme antibacterial activity 7052.
 lytic enzymes, isolation, characterization 92.
 mastitis, disease control, quaternary ammonium compounds, teat dips, antibacterial activity, cattle 1728.
 media (selective), cell culture temperature relationship 2661.
 menaquinone biosynthesis, precursors, enzymes, genetic control, reviews 6628.
 methicillin antibiotic resistance 8740.
 methicillin antibiotic resistance, fatty acid composition 8723.
 methicillin sensitivity, cloxacillin disc-diffusion test 639.
 micrococcal endonuclease biosynthesis, carbon dioxide effects on 9182.
 milk, enterotoxins production, deoxyribonuclease production 2965.
 netilmicin antibacterial activity 7152.
 norfloxacin antibacterial activity 7057.
 norfloxacin antibacterial activity, comparison, nalidixic acid, cinoxacin, oxolinic acid 5197.
 nose clinical isolates, antimicrobial agents sensitivity 3313.
 nosocomial infection, gentamicin resistance 649.
 oral isolates, bacteriocins, purification, characterization, antibacterial activity 3423.
 oxacillin bactericidal activity, factors affecting 2547.
 pasteurized milk, Feeding trials, cattle, juveniles 4869.
 penicillin-binding protein, affinity ceftazidime, antibacterial activity 8835.
 penicillin-binding protein, binding clavulanic acid, sulbactam, effects on antibacterial activity 7134.
 penicillin-binding protein, binding, monobactams, association, antibacterial activity 3375.
 pH effects on, survival, freeze-thawing, meat 4816.
 phage typing 893.
 phagocytosis, phagolysosomes, pH intracellular levels, bactericidal activity, aminoglycoside antibiotics, antibiotic resistance 9733.
 phosphatidylinositol specificity phospholipase C, purification, characterization 8236.
 phosphocarrier protein, subunit structure, active sites 4.
 phospholipid composition, methicillin antibiotic resistance 9648.
 piromidic acid antibacterial activity 1556.
 plants extracts antibacterial activity, Iran 2458.
 plasmids, antibiotic resistance, gentamicin, methicillin 6019.
 plasmids transfer aminoglycoside antibiotics antibiotic resistance 7046.
 poly(hexamethylene biguanide hydrogen chloride), antibacterial activity 2450.
 poly(N-benzyl-4-vinylpyridinium bromide), removal, water treatment, methodology 9046.
 propolis -antibiotics antibacterial activity 6058.
 protein A, solid phase methods, enzyme immunoassay, urine albumin 5397.
 proteolysis, gene mapping, computer applications 4508.
 radiosensitization, β -hydroxybenzoic acid 5173.
 recovery, animals, pleural fluid, synovial fluid, media methodology 3609.
 recovery methodology, media (culture), neutralization 5425.
 respiratory tract infection, bekanamycin treatment, man, antibacterial activity 6186.
 rifampicin \pm oxacillin, bactericidal activity 5263.
 floccal-D antibacterial activity 7918.
 sensitivity, fosfomycin \pm amoxicillin 8040.
 septa, peptidoglycans, biosynthesis, role, methicillin, antibiotic resistance

Staphylococcus aureus, (continued)

5148.
 serotyping, antisera, media (culture) effects on 881.
 sodium hypochlorite decontamination, skin tissue culture 8092.
 spoilage, meat, organoleptic properties 2038.
 staphylococcal detection, *Corynebacterium* bioassays 6224.
 survival, food, preservatives, effects on 6683.
 D-tagatose-1,6-bisphosphate aldolase, purification, characterization 6426.
 D-tagatose-6-phosphate kinase, purification, characterization 6443.
 teichoic acid, antibodies detection, counter immunoelectrophoresis, immunodiagnosis, infection 9927.
 teichoic acid antibodies, detection, enzyme-linked immunosorbent assay 9939.
 teichomycin A2 antibacterial activity 3322.
 thermal injury recovery, meat products, preservatives effects on 284.
 thermal stability, nuclease, role viability, food processing 266.
 thiacycline antibacterial activity, comparison, tetracycline, doxycycline, minocycline 1637.
 toxic shock syndrome isolates, endotoxins, exotoxins, characterization 6706.
 α -toxin, amino acid composition 2076.
 α -toxin production association growth 6709.
 toxins, purification methodology, separation techniques 4917.
 trapping, fibrin polymerization 2698.
 triacylglycerol lipase, purification, characterization 1876.
 udder hygiene, teat dips, susceptibility, in vitro 6038.
 use, coated vesicles isolation, immunoadsorption 884.
 use, immunoadsorption, association, isolation methodology, Langerhans cells 5395.
 vancomycin, rifampicin, fusidic acid 3383.
 viability, freeze-thawing, skim-milk 220.
 viability, ultrastructure, fosfomycin treatment effects on 7060.
Staphylococcus capitis,
 antibacterial activity, benzoyl peroxide 7064.
Staphylococcus carnosus,
 antibacterial activity, *Streptococcus* mutants bacteriocins 8025.
Staphylococcus epidermidis,
 amniotic fluid antibacterial activity 6042.
 antibacterial activity, antibiotic synergism, vancomycin \pm gentamicin \pm rifampicin 7126.
 antibacterial activity, benzoyl peroxide 7064.
 antibacterial activity, cefonicid, ceforanide, cefazolin 7995.
 antibacterial activity, Cephalosporins derivatives, structure-activity relationships 8840.
 antibacterial activity, fosfomycin 7184.
 antibacterial activity, teichomycin 7183.
 antibacterial activity, vancomycin comparison, vancomycin 8899.
 antibiotic resistance 3392.
 antibiotic resistance development 6020.
 antibiotic sensitivity testing 7122.
 antibiotics sensitivity 8828.
 API test, identification, biotyping 9910.
 candida extracts antibacterial activity 3317.
 cefodizime antibacterial activity 7142.
 clinical isolates, biochemical characteristics, antibiotics sensitivity 8827.
 clinical isolates, blood culture, sucrose effects on detection 9955.
 conjugation, plasmids, drug resistance, gentamicin 3273.
 fructose-bisphosphate aldolase active sites, amino acid sequence 961.
 heat resistance, sodium chloride, eggs effects on 4848.
 isolation, milk, meat 3826.
 β -lactamase, antibiotic tolerance, β -lactam antibiotics, screening 637.
 lactic acid biosynthesis 8206.
 methicillin antibiotic resistance, fatty acid composition 8723.
 norfloxacin antibacterial activity 7057.
 plasmids transfer aminoglycoside antibiotics antibiotic resistance 7046.
 teichomycin A2 antibacterial activity 3322.
 tetracycline sensitivity 7077.
 trapping, fibrin polymerization 2698.
 trimethoprim drug resistance 4279.
Staphylococcus haemolyticus,
 antibacterial activity, antibiotic synergism, vancomycin \pm gentamicin \pm rifampicin 7126.
Staphylococcus hominis,
 antibacterial activity, antibiotic synergism, vancomycin \pm gentamicin \pm rifampicin 7126.
 plasmids transfer aminoglycoside antibiotics antibiotic resistance 7046.
Staphylococcus intermedius,
 animal isolates, antibiotic resistance, heavy metals resistance 3279.
Staphylococcus mutans,
 conalbumin antibacterial activity, microflora 5181.
Staphylococcus pyogenes,
 isolation, operating theaters, control, pathogens, airborne microorganisms 7206.
 tetracycline sensitivity 7077.
Staphylococcus saprophyticus,
 adherence, plastics 3492.
 antibiotic sensitivity testing 7122.
 clinical isolates, antimicrobial activity, antibacterial activity 680.
 lytic enzymes, isolation, characterization 92.
 novobiocin, antibiotic sensitivity testing 8879.
 trimethoprim drug resistance 4279.
 urease biosynthesis, isolation 7339.
 urine, media (isolation) 9951.
Staphylococcus simulans,
 extracellular enzymes biosynthesis, amino acids, cyclic AMP, effects on 2792.
 lytic enzymes, isolation, characterization 92.
Starch,
 aggregation, association, *Haemophilus ducreyi* detection 3583.
Aureobasidium pullulans, growth rate, exo-1,4- α -D-glucosidase 6403.
Bacillus subtilis α -amylase, immobilized enzymes, activity association, non-linearity 9134.
 biodegradation, activity, *Aspergillus awamori* var. *kawachi* chitin immobilized enzymes, α -amylase 106.
 biosynthesis, photosynthesis, algae, symbiosis, bacteria 3708.
 Cucumber mosaic virus, infection, *Nicotiana glauca*, effects on, ultrastructure 3078.
 degradation, association ethanol production 1051.
 effects on, bacteria growth, crop residues digestion, forage quality 4860.
 fermentation, glucose biosynthesis, bacteria α -amylase use 4699.
 fermentation, production, ethanol, selection, yeasts, strains 3756.

Starch, (continued)

- fermentation, *Zymomonas mobilis*, ethanol production 9233.
hydrolysis, α -amylase, *Bacillus circulans* 6520.
hydrolysis, exo-1,4- α -D-glucosidase, *Trichoderma viride* 6499.
hydrolysis, exo-1,4- α -D-glucosidase, *Endomycopsis fibuligera* 6498.
hydrolysis, *Schwannomyces alluvius*, derepression mutants 8452.
metabolism, ethanol fermentation, yeasts 5570.
nutrient sources, *Aspergillus oryzae*, lipids production 2855.
yeasts, lactic acid bacteria, fermentation control 8412.

Starches

- conversion, ethanol, mixed culture, *Saccharomycopsis fibuliger* + *Zymomonas mobilis* 7529.

Starter cultures

- cheddar cheese, milk, contamination, phages 4804.
cheese, inhibition, antibiotics levels, milk 8482.
goats milk fermentation 9268.
lactic acid bacteria, fermentation, soybean milk 216.
lactic acid bacteria, freeze drying, viability 9878.
lactic acid bacteria, sourdough, acid production 5620.
lactic acid bacteria, sugar fermentation, soybean milk 6674.
Lactobacillus acidophilus, yogurt 2914.
Lactobacillus plantarum, continuous culture, methodology 6343.
levels, lactic acid bacteria, organoleptic evaluation, cheese 3822.
meat, *Lactobacillus plantarum*, phages, isolation, characterization 6676.
mesophilic bacteria, Cheddar cheese 3820.
pancicium, poultry sausages 3814.
pep sauce, *Pseudococcus halophilus*, organic acids metabolism 1054.
storage, dairy industry 2033.
Streptococcus lactis, β -D-galactosidase mutants, Cheddar cheese, organoleptic evaluation 9269.
Streptococcus lactis, effects on ripening, proteolytic enzymes, organoleptic evaluation, Cheddar cheese 9271.
Streptococcus lactis inhibition, *Streptococcus cremoris* 7580.
Streptococcus lactis, mutants, lactose fermentation, cheddar cheese, production 7570.
Streptococcus, *Lactobacillus*, kefir 186.
Streptococcus, plasmids isolation, methodology 4493.
Streptococcus thermophilus, acid production, water content, cheese 8462.
Streptococcus thermophilus, *Lactobacillus bulgaricus*, antimicrobial activity, vitamins, D-D-galactosidase activity, yogurt 7591.
temperature, lactic acid bacteria, buttermilk production 4802.
thermophilic bacteria, fermentation, acidic curd cheese 8459.
yoghurt, relationship, milk, *Streptococcus thermophilus*, *Lactobacillus bulgaricus* 3848.

Starvation

- iron, electrophoresis methodology, siderophores detection 8090.

Statistical analysis

- bacteria, counting methods 1793.
methodology, antimicrobial agents susceptibility, *Escherichia coli* 1795.
Pseudococcus strombos, stripe rust, epidemiology, *Triticum aestivum* 2125.
sampling, bacteria cell culture, species diversity measurements methodology 870.

Stauroporine

- Streptomyces*, structure 4724.

Steel

- corrosion, heterotrophic bacteria, role, dissolved oxygen, sea water 9626.
industries, activated sludge, wastewater treatment 5306.
surfaces, corrosion, films, aquatic microorganisms, fouling organisms, sea water 1055.

Steffimycinone

- antibacterial activity 8775.

Stellaria media

- disease reservoirs, tomato ringspot virus, prunus 1209.

Stem blight

- Cucumis, epidemiology, relationship, powdery mildew, pest attack 1248.

Stem canker

- Botryosphaeria corticis*, *Vaccinium corymbosum*, incidence, USA, New Jersey 6831.
Cytospora chrysospora, histopathology, *Populus maximowiczii* 9520.
pathology, *Helianthus annuus* 8594.
Diaporthe phaeospora var. *caulivora*, *Glycine max*, epidemics 9327.
Fusarium solani, *Ipomoea batatas* 5000.
Glycine max, virulence, *Diaporthe*, *Phomopsis* 3925.
Phomopsis alinea, *Alnus glutinosa* 5868.
Rhizoctonia solani, disease control, iprodione, benodanil, thiabendazole, *Solanum tuberosum* 5055.

Stem rot

- Alternaria alternata*, association, benomyl, disease control, blue mold, *Penicillium expansum*, *Pyrus communis* 9373.
Drepanochaeta maculata, *Fusarium solani* 1288.
Drechslera cactivora, *Rhizoglyphus gaehteri* 1261.
Exacum affine, *Nectria haematococca* infection 1262.
Fusarium roseum, *Padusa glauca* mesziessii seedlings, *Pseudotsuga menziesii*, seedlings, *Fusarium roseum* stem rot 5875.
Glycine max, disease resistance, measuring techniques 6869.
Persea gratissima, disease control, prochloraz 6833.
Phialophora gregata, disease resistance, plant breeding, *Glycine max* cultivars 5040.
Phialophora gregata, disease resistance, plant breeding, *Glycine max* 9457.
Phoma lingam, disease control, agricultural practices, *Brassica napus* 495.
Pythium ultimum, wounds healing, cuttings, *Pelargonium* 5745.
Rhizoctonia solani, interaction root rot, *Fusarium solani* f.sp. *pisi*, *Pythium ultimum*, *Aphanomyces euteiches*, *Pisum sativum* 9328.
Rhizopus arrizus, pathology, *Nicotiana glauca* 5762.
Sclerotium oryzae, *Oryza*, disease resistance 9469.

Stem rust

- Cornarum, *Pinus*, *Rodentia*, feeding damage 2318.
disease resistance, genetic analysis, *Triticum aestivum* 1348.
disease resistance, *Triticum aestivum*, genetic control 7731.
disease resistance, *Triticum turgidum*, genetic control 7728.
plant breeding, disease resistance, *Triticum aestivum* 447.
Puccinia graminis f.sp. *avenae*, *Avena sativa*, virulence 9352.
Puccinia graminis f.sp. *avenae*, epidemiology, *Avena sativa*, USA, Texas, Mexico 4962.
Puccinia graminis f.sp. *dactylidis*, genetic analysis, *Dactylis glomerata* 357.
Puccinia graminis f.sp. *tritici*, disease resistance, plant breeding, *Triticum aestivum* 8603.
Puccinia graminis f.sp. *tritici*, disease resistance, role proteins metabolism,

Stem rust, (continued)

- Triticum aestivum* 4075.
Puccinia graminis f.sp. *tritici*, disease resistance, *Triticum aestivum*, genetic analysis 453.
Puccinia graminis f.sp. *tritici*, pathogenesis, *Triticum aestivum* 9351.
Puccinia graminis f.sp. *tritici*, photosynthesis inhibitors effects on, *Triticum aestivum* 3948.
Puccinia graminis f.sp. *tritici*, races, overwintering, *Triticum aestivum*, USA, Texas, Mexico 4961.
Puccinia graminis f.sp. *tritici* races, virulence, *Triticum aestivum* 4958.
Puccinia graminis f.sp. *tritici*, strains, characterization, *Triticum* 3944.
Puccinia graminis f.sp. *tritici*, virulence gene frequency, *Triticum aestivum* 5041.
Triticum aestivum, disease resistance, Hungary 7735.
Triticum, disease resistance, measuring techniques, DNA hybridization 449.
Triticum, *Puccinia graminis*, disease control, *Barbans vulgaris* eradication, USA 1389.
- Stem spot**,
Helianthus annuus, *Alternaria helianthi* infection 1255.
- Stemphyllium botryosum**,
leafspot, *Medicago sativa* 5670.
leafspot, *Medicago sativa*, disease resistance, screening 6860.
leafspot, pathogenesis, light, relative humidity effects on, *Medicago sativa* 1141.
- Stemphyllium globuliferum**,
leafspot, *Medicago sativa* 5670.
- Stemphyllium loti**,
 β -glucosidase activity, detection, azo dyes 2713.
immobilized cells, cyanide hydratase, cyanide detoxification 982.
- Stemphyllium vesicarium**,
leafspot, *Medicago sativa* 5670.
purple spot, pathology, *Asparagus officinalis* 1296.
- Stems**,
Aeschynomene, nodulation, *Rhizobium*, characterization 7836.
Chrysanthemum morifolium, *Pseudomonas cichorii* necrosis outbreaks, USA, Florida 5023.
Glycine max, *Macrophoma phaseolina* saprophygy, herbicides effects on 2380.
Lycopersicon esculentum, detection, *Phoma exigua* var. *foveolata* infection 4031.
Lycopersicon esculentum, *Pseudomonas corrugata* necrosis incidence, USA, Florida 5025.
Papaver somniferum, *Sclerotinia sclerotiorum* infection, effects on morphine production, distribution 6812.
trees, isolation, *Cylindrocylindrium*, *Fusarium*, media (selective) 6352.
Vitis vinifera, oxidation pretreatment, biodegradation, rumen microorganisms 2009.
water potential, relationship, electrical properties, *Verticillium dahliae* infection, *Acer rubrum* 2311.
Zea mays, nitrogen fixation 8699.
- Stenella bougainvilleae sp. nov.**,
isolation, host plants, *Bougainvillea spectabilis*, taxonomy 1254.
- Stenocarpella macrospora**,
pathogenicity, comparison, *Stenocarpella maydis*, *Zea mays*, USA 6780.
- Stenocarpella maydis**,
pathogenicity, comparison, *Stenocarpella macrospora*, *Zea mays*, USA 6780.
- Stenotaphrum secundatum**,
disease resistance, *Panicum mosaic* virus infection 3117.
Gammapias, susceptibility, infection, *Pynculania grisea* 7665.
Panicum mosaic virus infection 4948.
plant viruses, plant diseases, characterization 4950.
Sclerophthora macrospora infection, disease resistance 9470.
- Steppes**,
forests, trophic relations, community structure, nutrient dynamics 1448.
- Stenochimistry**,
biuretinmycin 1622.
lysine 2,3-aminomutase, *Clostridium subterminale* 75.
mycinolide IV, X-ray crystallography 1652.
ornithine decarboxylase, lysine decarboxylase, arginine decarboxylase, *Escherichia coli*, *Bacillus cadaveris* 6506.
phosphoenolpyruvate-fructose phosphotransferase mechanisms, *Escherichia coli* 82.
- Stenotaphrum**,
Larix defoliation, association *Adelges* grazing 540.
- Stereum complicatum**,
USA mines forest products biodegradation 7792.
- Stereum gausapatum**,
USA mines forest products biodegradation 7792.
- Stereum purpureum**,
canker, disease resistance, *Malus pumila* 1357.
- Sterigmatocystin**,
biosynthesis, N.M.R., acetic acid, *Aspergillus versicolor* 6699.
pretreatment, *Drosophila melanogaster*, effects on aflatoxin B1 toxicity 7617.
- Sterility**,
air, filtration, aeration, fermentation 7119.
cattle, feeds contamination, fungi, mycotoxins 4890.
medical equipment, hydrogen peroxide, glutaraldehyde, sanitizers 5227.
- Sterilization**,
Bacillus thuringiensis, temperature time, effects on 4323.
bacteria, packaging 4321.
bottles 4874.
bottles, contamination source, microorganisms, wineries 258.
canning, food processing 268.
cleaning systems, breweries 5336.
death kinetics, microorganisms, media (culture) 7963.
dental sealants 6284.
ethylene oxide, indicator species, *Bacillus subtilis* subsp. *niger*, factors affecting 4322.
filtration, air flow, fermentation 8348.
heat transfer, canning 2059.
heat treatments, association, microorganisms reactivation 2499.
lactose solutions, heat, *Thermomonospora* growth inhibition 2907.
measuring techniques 5226.
media (culture) equipment, γ radiation 707.
media instruments, parafilm-aldehyde tablets use 5228.
methodology, formaldehyde gases 8901.
methodology, fungal flora, *Thalassia testudinum* leaves 3623.
methodology, *Gaeumannomyces*, seeds, *Triticum* 5846.
microwave radiation, culture systems plastics, bacteria 708.
milk, γ radiation 8496.

Sterilization, (continued)

- Plasmodium* sajor-caju spores 4516.
 potatoes processing, packaging 4801.
 γ radiation, medical importance 9707.
 soils (loam), effects on nitrogen content, soil microorganisms, bacteria, respiration 6977.
 tomatoes juices, canning, baths 262.
 veterinary medicine, disinfection 6274.
 water, U.V. radiation, effects on bacteria 4325.
 wine, dimethyl carbonate fungicidal activity, *Saccharomyces cerevisiae* 2868.
 wine, filtration, methodology 3861.

Sterilizers,

- isolation, spores, sampling, methodology 8802.

Steroid 9 α -monooxygenase,

- purification, characterization, *Nocardia* 976.

Steroid-binding protein,

- purification, characterization, *Pseudomonas testosteroni* 1837.

Steroids,

- bacteria, fungi, immobilized cells, transformation, reviews 3706.
 biosynthesis, utilization, technology, microorganisms 4698.
 conversion, bacteria enzymes 7433.
 conversion, immobilized cells, immobilized enzymes, reviews 3707.
 conversion, microorganisms catalysts 5530.
 hydroxylation, glucose, effects on, *Pellicularia filamentosa* 6564.
 hydroxylation, *Pellicularia filamentosa* 109.
 hydroxylation, use, microorganisms, reviews 7218.
Nocardia erythropolis, enzymes, sterols biodegradation 1948.
 transformation, immobilized cells, *Arthrobacter globiformis*, *Saccharomyces cerevisiae* 4697.

Sterol composition,

- Candida albicans*, plasma membranes, antibiotic resistance, nystatin 3277.
 lycopersicon esculentum fruits, association, pathogenicity, *Fusarium solani* 7049.
 Lycopersicon esculentum, role, late blight pathogenesis, light intensity effects on 5785.
Saccharomyces cerevisiae, association, selection, wine production 3759.

Sterols,

- biodegradation, *Nocardia erythropolis* enzymes 1948.
 biodegradation, *Nocardia*, media (culture) effects on 2893.
 biosynthesis, *Candida parapsilosis*, naffrine, antifungal activity 7930.
 biosynthesis, *Saccharomyces cerevisiae*, antifungal agents effects on 5203.
 demethylatan, *Candida*, antifungal activity, imidazoles 7936.
 demethylation, fungicides, inhibition, *Saccharomyces cerevisiae* 4117.
 mesophilic, biodegradation, *Mytilus edulis*, microorganisms 7554.
 production relationship, ergosterol biodegradation defective mutant, *Saccharomyces cerevisiae* 9187.
 wine fermentation role, *Saccharomyces* 4743.

Steryl esters,

- content, Lycopersicon esculentum, *Phytophthora infestans* infection, relationship, susceptibility 3983.

Steryl glycolides,

- content, Lycopersicon esculentum, *Phytophthora infestans* infection, relationship, susceptibility 3983.

Steviol,

- use, *Gibberella fujikuroi*, gibberellins synthesis 5558.

Stilbene cinnabarina,

- stem rot, *Persea gratissima*, disease control, prochloraz 6833.

Stilpnolia salicis,

- pest control, biological control, *Bacillus thuringiensis* 3718.

Stimulants,

- yeasts, effects on, *Streptomyces levoris*, biosynthesis, biotin, levorin, coenzyme A 8021.

Stochospermum marginatum,

- antigenoids, antibacterial activity, *Staphylococcus aureus* 3315.

Stomata,

- Ulmus, mycoplasma-like organisms yellows effects on 3171.

Storage,

- actinomycetes, antibiotics sensitivity, morphology 7070.
 antigenic characteristics, preservation viruses, phosphorus tungstic acid+ammonium molybdate 7226.
 association, tobacco leaves post-harvest decay, thermophilic fungi 8599.
 barley, factors affecting, fungi disease control 7724.
 barley, post-harvest decay, long-term effects, microorganisms 1321.
 breast milk, effects on cytomegalovirus 1079.
 carbon dioxide, disease control, post-harvest decay, blueberries, fungi infection 3106.
 chickens feeds, γ radiation effects on 8492.
 corn, spoilage, association, mycotoxins production fungi 2069.
 corn, wheat, food contamination, *Aspergillus* 443.
 effects on cytokinins, mushrooms, food spoilage 3816.
 effects on immunogenicity, vaccines, mumps virus, measles virus, rubella virus 4429.
 effects on spoilage, yeasts, coliforms, meat products, taste panel evaluation 4771.
Erwinia carotovora culture collections, pathogenicity, soft rot 2239.
 +freeze drying effects on *Bacillus brevis* spores viability, gramicidin S biosynthesis 9783.
 fungi, nitrogen (liquid), culture collections 4540.
 fungi, plant extracts antifungal activity 7934.
 gases composition, *Lactobacillus*, spoilage, frankfurters, pork 5639.
 gram, contamination, aflatoxin B1, fungal flora 7616.
 levorin, stability time association 1654.
 levorin, stabilization association 2594.
 microorganisms, culture collections 5363.
 milk, contamination, bacteria, food quality 4837.
 milk, dairies, bacteria, growth, contamination 4832.
 milk, psychrotrophic bacteria, growth 9273.
 Mycobacterium, freezing, freeze-drying 1800.
 nitrogen (liquid), *Diplocarpon rosae* conidia 3629.
 refrigeration, milk, bacteria growth 4826.
 refrigeration, milk, *Pseudomonas* growth 4830.
 Rhizobium, viability association, role, temperature, media 7242.
 rumen anaerobic bacteria, viability 1802.
Saccharomyces, biomass chemical composition, wine fermentation residues 7512.
 seafood, *Crossostrea virginica*, *Mercenaria campechiensis*, effects on bacteria 4765.
 soil, effects on enzymes activity, soil microorganisms 5919.

Storage, (continued)

- soils (loam), effects on nitrogen content, soil microorganisms, bacteria, respiration 6977.
 Solanum tuberosum, effects on disease resistance, *Erwinia chrysanthemi*, post-harvest decay 7721.
 starter cultures, dairy industry 2033.
Streptococcus pneumoniae, *Haemophilus influenzae*, clinical isolates, association, survival 2681.
 time, bagasse, effects on post-harvest decay, fungi 5030.
 wine, lactic acid bacteria incidence, ethanol fermentation 9243.
 yeasts, culture collections, nitrogen (liquid), freezing 8150.
 yeasts, processing, baking, physicochemical properties 5621.
- Storage conditions,**
 Cosmos sulphureus seeds, effects on fungal flora 4048.
 effects on, *Alternaria solani*, infection, Solanum tuberosum 4007.
 effects on *Aspergillus* infection, *Vigna radiata* seeds 2111.
 effects on *Rhizoctonia solani* survival, bulbs, Tulipa, Iris 3973.
 effects on, virulence, *Culex pipiens*, *Metarhizium anisopliae*, conidia, viability 7480.
 fishery products, carbon dioxide, nitrogen, temperature, effects on, *Pseudomonas*, *Moraxella*, *Lactobacillus* 8498.
 forests, soil, drying, soil microorganisms, species diversity 5856.
 meat, shelf life, bacteria levels 7598.
Pseudomonas marginalis soft rot, post-harvest decay, tomatoes 9453.
 seafood, carbon dioxide, effects on spoilage 2921.
 seafood, spoilage bacteria, chlorotetracycline + sodium chloride treatment effects on 2922.
Streptomyces griseus, effects on, viability, grisin production 8120.
 wheat gluten, biodegradation, microorganisms 2915.
- Stored products,**
 fungi, spoilage 436.
 grain, fungi, degradation, malathion, *Aspergillus glaucus* 7557.
 pest control, *Ephestia cautella*, *Plodia interpunctella*, captan, compatibility, *Bacillus thuringiensis* 7495.
 pest control, *Ephestia cautella*, *Plodia interpunctella*, captan, compatibility, *Bacillus thuringiensis* 8351.
 sorghum, post-harvest decay, fungi, effects on growth *Insecta* 5799.
- Strains,**
 Rhizobium identification, antibiotics use 887.
 Rhizobium identification, antibiotics use 890.
- Strasseria oxycocci,**
 black rot, pathology, *Vaccinium macrocarpon* 4050.
 black rot, pathology, *Vaccinium macrocarpon* 4052.
- Straw,**
 bedding, mycotoxins isolation, *Stachytarax atra*, toxicity, sheep 4897.
 biodegradation, microorganisms, role, soil, volcanic ash, stabilization 5091.
 biodegradation, *Pleurotus ostreatus* 5587.
 biodegradation, rumen microorganisms, association, hydrolysis, oxidation 4751.
 biodegradation, soil bacteria, phytotoxicity 8419.
 carbohydrates, biodegradation, fungi 8442.
 cellulose biodegradation, *Penicillium corylophilum* 3216.
 cellulose biodegradation, *Trichoderma* 7539.
 composts, microorganisms biomass, association, *Agaricus bisporus* nutrition 2923.
 decomposition, soil microorganisms, respiration, C/N ratios 6966.
 degradation, *Trichoderma reesei* cellulase, *Triticum aestivum* cultivars effects on 8415.
 fermentation, solid-phase methods, fungi cultures 8444.
 +food wastes substrates, methane hydrogen fermentation 5995.
 lignin biodegradation, fungi 171.
 +manure mixtures, methane production 9630.
 nitrogen fixation, *Clostridium butyricum* 3216.
 Orzya sativa, fermentation, *Penicillium anthracinum*, biomass production 7564.
 Orzya sativa, hydrolysis, cellulase, *Trichoderma reesei* 7430.
 soil amendment, effects on nitrogen fixation, rhizosphere, Zea mays 9598.
 substrate, *Coprinus* mutants, cellulose biodegradation improvements 6658.
Triticum aestivum, *Pleurotus ostreatus* + *Erwinia carotovora*, culture, effects on, nutritive value, *Ruminantia* 254.
Triticum, biodegradation, soil, *Cephalosporium gramineum*, effects on 8451.
Triticum, production, single-cell protein, *Myrotilium verrucaria* 1084.
Triticum, Vicia faba, composting, mesophilic fungi colonization 3781.
Triticum, Vicia faba, composting, thermophilic fungi colonization 3780.
 use, *Penicillium janthinellum*, growth, protein biosynthesis 8211.
- Strawberry latent ringspot virus,**
 infection, cytology, *Chenopodium amaranticolor* 3040.
 mixed infection, alfalfa mosaic virus, *Vitis vinifera* 2178.
- Streak,**
 etiology, viruses, *Persea americana* 9372.
- Streams,**
Campylobacter fetus subsp. jejuni, waterborne diseases 6260.
 sediments, wood decomposition, bacteria 2885.
 surface water, water quality, environmental impact, cattle, grazing, USA, Colorado 8873.
- Streblus asper,**
 extracts, antiviral agents, vaccinia virus 3343.
- Streptococcus,**
 animal isolates, antibiotic resistance, salinomycin feeding, chickens effects on 3289.
 animal isolates, chemotherapeutics sensitivity 5193.
 antibacterial activity, cefaclor, cefadroxil 731.
 antibacterial activity, cysteine 3319.
 antibacterial activity, dimethyl sulfoxide: antibacterial agents 7919.
 antibacterial activity, macrolide antibiotics 8041.
 antibacterial activity, rifampicin+teichomycin, +vancomycin 3392.
 antibacterial activity, teichomycin, vancomycin, vancomycin 8011.
 antibacterial activity, teichomycin, vancomycin 8011.
 antibacterial activity,
 6- α -hydroxyethyl-2-acetoxyethyl-2-penem-3-carboxylate 1611.
 antibiotic sensitivity testing 1598.
 antibiotic sensitivity testing 9718.
 antibiotic sensitivity testing, teichomycin, vancomycin 6202.
 antibiotic sensitivity testing, use, tetracycline reduction, methodology 9975.
 bisphindines, structure-function relationship, antimicrobial activity, dental plaque 5222.
 classification, serological tests methodology 9886.
 clinical isolates, antibiotic sensitivity testing 724.
 contamination, goats meat, frozen foods 5806.

Streptococcus, (continued)

- detection, media (selective) methodology, association, food contamination 5416.
 enterotoxins detection, food poisoning, man 3892.
 fecal microflora, media (isolation) 3595.
 fecal microflora, species 6304.
 feces, indicator species enumeration, water sampling, light effects on 2625.
 feces, man, water resources, quantification 5322.
 food contamination, luncheon meat, factors affecting spoilage 2029.
 β -D-glucan, isolation, characterization 9190.
 groups, antigens use, agglutination methodology 3563.
 identification, agglutination 4499.
 identification, gas chromatography, computer applications 2672.
 identification, latex agglutination, blood culture 5412.
 indicator species, microbial pollution, sediments, coastal waters 8065.
 lactic acid bacteria, plasmids DNA isolation 9047.
 lactic acid fermentation, milk products media methodology 5426.
 latex agglutination false-positives 9922.
 mastitis, disease control, quaternary ammonium compounds, teat dips.
 antibacterial activity, cattle 1728.
 mastitis, isolates, antibiotic resistance, macrolide antibiotics, lincomycin, clindamycin 2398.
 mastitis, relationship udder hygiene, cattle 4453.
 norfloxacin antibacterial activity 8760.
 phages, viability, why 4806.
 pharyngitis, man, diagnosis, nitrous acid extraction+agglutination 9905.
 production, bacteriocins 2583.
 putrefaction formation, mutanolysin treatment, dairy industry 5414.
 sepsis, occupational exposure, meat industry, hygiene, man 2634.
 spoilage, luncheon meat, shelf life 4872.
 starter cultures, kefir 186.
 starter cultures, plasmids isolation, methodology 4493.
 streptokinase, amino acid sequence 1883.
 water pollution, sediments, sewage outfalls 796.
Streptococcus agalactiae,
 bile tolerance 5399.
 fermenters growth, CAMP protein production 6398.
 isolation, milk, meat 3826.
 meningitis, diagnosis, latex agglutination 9957.
 N,N-dimethylidene-diamine antibacterial activity, relationship, pH, temperature, emollients 5175.
Streptococcus bovis,
 carbohydrates effects on fungi patulin antibacterial activity 273.
 cattle rumen microorganisms, media (isolation) use ribulosebiphosphate carboxylase 7243.
 β -lactam antibiotics antibiotic resistance, role, penicillin-binding protein 4273.
 serotyping 7253.
Streptococcus cremoris,
 biosynthesis, monocarboxyls, association, cream ripening 205.
 fermentation effects on proteins, milk products production 4805.
 fructose-bisphosphate aldolase, purification, characterization 94.
 inhibition Streptococcus lactis, starter cultures 7580.
 lactate dehydrogenase, purification, characterization 4642.
 phages, survival, cold storage 8103.
 production, bacteriocins 2583.
 starter cultures temperature, buttermilk production 4802.
Streptococcus diacetylactis,
 starter cultures, fermentation, soybean milk 216.
Streptococcus diacetylactis,
 aroma compounds production, mutation stimulation 7474.
 fermentation effects on proteins, milk products production 4805.
 phages, survival, cold storage 8103.
Streptococcus durans,
 heat resistance 2402.
Streptococcus equisimilis,
 temperature effects on extracellular, protein biosynthesis 8214.
Streptococcus faecalis,
 adenosinetriphosphatase, amino acid sequence 1911.
 antibacterial activity, β -lactam antibiotics 739.
 antibacterial activity, β -lactam antibiotics 4330.
 antibacterial activity, antibiotic synergism, N-formimidoyl thienamycin \pm gentamicin \pm amikacin 3417.
 antibacterial activity, azlocillin, penicillins, cephalosporins 8822.
 antibacterial activity, Cephalosporins derivatives, structure-activity relationships 8940.
 antibacterial activity, fosfomycin 7184.
 antibacterial activity, gentamicin, \pm ampicillin, \pm cefathiamidine 7982.
 antibacterial activity, piperacillin 9757.
 antibacterial activity, rifamycin derivatives 8858.
 antibacterial activity, teichomycin 7183.
 antibiotic sensitivity testing, teichomycin, vancomycin 6202.
 2,3-butyleneglycol production 1040.
 cell injury, association, novobiocin, coumermycin 5280.
 clinical isolates, gentamicin resistance 6027.
 enzymes, aminoglycoside antibiotics antibiotic resistance 3291.
 fatty acids, gas chromatography, use, capillary column 5429.
 feces, man, water resources, quantification 5322.
 fermentation, milk+colostrum, food sources, juveniles, cattle 7599.
 N-formimidoyl thienamycin, +gentamicin, +tobramycin, antibiotic synergism, antibacterial activity 1623.
 heat resistance 2402.
 indicator species, ground water microbial pollution 8979.
 β -lactam antibiotics antibiotic resistance, role, penicillin-binding protein 4273.
 Lactobacillus acidophilus lactacin B antibacterial activity 7172.
 poly(N-benzyl-4-vinylpyridinium bromide), removal, water treatment, methodology 9046.
 polypolyglutamate synthetase, purification, characterization 67.
 tyrosine decarboxylase assays, spectrophotometry 7345.
Streptococcus faecalis subsp. liquefaciens,
 heat resistance 2402.
Streptococcus faecium,
 antibacterial activity, gentamicin, \pm ampicillin, \pm cefathiamidine 7982.
 feeds, pigs, effects on intestinal microflora 4859.
 N-formimidoyl thienamycin, +gentamicin, +tobramycin, antibiotic synergism, antibacterial activity 1623.

Streptococcus faecium, (continued)

- growth conditions, relationship, β -lactam antibiotics, antibacterial activity 5249.
 heat resistance 2402.
 β -lactam antibiotics antibiotic resistance, role, penicillin-binding protein 4273.
 RNA association thymidylate synthase 4598.
 use pyruvic acid electrodes 8119.
Streptococcus group A,
 antibacterial activity, enocin 1677.
 antigen M, antibodies detection, passive hemagglutination 6325.
 culture methodology, anaerobic conditions, infection diagnosis, man 2696.
 differentiation, use, muramidase lysis activity 3547.
 isolation, anaerobic conditions, aerobic conditions 9962.
 opacity factor, purification, characterization 2740.
 rhamnose, N.M.R. 7436.
Streptococcus group B,
 antibacterial activity, cloxacillin, methicillin, cefamandole 3409.
 antibiotic sensitivity testing, β -lactam antibiotics 723.
 antibiotic sensitivity testing, media (culture), antibiotic resistance 7966.
 antigens detection, latex agglutination, amniotic fluid, monkeys 9938.
 clinical isolates, R-protein incidence 6383.
 Granada medium, use, identification 9976.
 identification, hippuric acid hydrolysis 9024.
 immunosays 6327.
 β -lactamase, antibiotic tolerance, β -lactam antibiotics, screening 637.
 lactic acid biosynthesis 8206.
 polysaccharides, anti immunoglobulin G, enzyme-linked immunosorbent assay 5392.
 polysaccharides isolation, chemical composition 8334.
Streptococcus group C,
 clinical isolates, antibiotic sensitivity testing, penicillin G 7147.
Streptococcus group D,
 antibacterial activity, cefoperazone 7146.
 antibacterial activity, mezlocillin, penicillins, cephalosporins 9709.
 antibiotic resistance, aminoglycoside antibiotics 6024.
 antibiotic sensitivity testing, cephalosporins 9748.
 antibiotics antibacterial activity 719.
 clinical isolates, antibacterial activity, cephotaxim, cephuroxim 8830.
 contamination, mineral water, bacteria 2027.
 contamination, water quality, association otitis externa, epidemiology, man 2630.
 deoxyribonuclease activity, isolation, milk products 2919.
 N-formimidoyl thienamycin, antibacterial activity 3430.
 heat resistance 2402.
 identification, agglutination methodology 9935.
 identification methodology 9949.
 identification, agar + Autoclave test 9908.
 infectious diseases, man, association, clinical isolates antibiotics susceptibility 8826.
 β -lactam antibiotics antibiotic resistance, role, penicillin-binding protein 4273.
 lactic acid biosynthesis 8206.
 serotyping, 7253.
Streptococcus group G,
 antibiotics antibacterial activity 719.
 serotyping, Nigeria 1773.
Streptococcus lactis,
 biosynthesis, monocarboxyls, association, cream ripening 205.
 fermentation cattle colostrum proteins, effects on 246.
 fermentation effects on proteins, milk products production 4805.
 fermentation, milk+colostrum, food sources, juveniles, lactic acid bacteria 7599.
 fructose-bisphosphate aldolase, purification, characterization 94.
 β -D-galactosidase mutants, starter cultures, Cheddar cheese, organoleptic evaluation 9269.
 immobilization, sepharose 6317.
 inhibition Streptococcus cremoris, starter cultures 7580.
 inoculum, cheese, production 198.
 milk, heat treatments effects on 8470.
 mutants, lactose fermentation, starter cultures, cheddar cheese production 7570.
 nisin biosynthesis, inactivation 2587.
 phages, survival, cold storage 8103.
 6-phosphofructokinase, purification, characterization 6440.
 production, bacteriocins 2583.
 pyruvate kinase, purification, characterization 6421.
 starter cultures, effects on ripening, proteolytic enzymes, organoleptic evaluation, Cheddar cheese 9271.
 starter cultures temperature, buttermilk production 4802.
 use, electrodes, arginine 879.
Streptococcus lactis subsp. diacetylactis,
 lactic acid bacteria, starter cultures temperature, buttermilk production 4802.
 production, bacteriocins 2583.
Streptococcus lactis var. maltigenes,
 flavor compounds production, encapsulation 9217.
Streptococcus mitis,
 penicillin, antibiotic tolerance 1620.
 penicillin susceptibility, dilution tests, factors affecting 5179.
Streptococcus mitis,
 lactic acid biosynthesis 8206.
Streptococcus mutans,
 antibacterial activity, Magnolia obovata, Magnolia officinalis 1559.
 antibacterial activity, 4,5-diallyl-2,3-dihydroxybiphenyl ether, 3,4-dihydroxy-5-(p-allylphenoxy) cinnamic aldehyde, Magnolia obovata plant extracts 2433.
 bacteriocins, purification, characterization 6223.
 bacteriocins production, characterization, antibacterial activity 8025.
 dental caries, man, chlorhexidine, antibacterial activity 3503.
 dental caries prophylaxis use fluoride varnishes, animal models 8994.
 dental cement+chlorhexidine gluconate antibacterial activity 677.
 dental plaque formation, photometry, in vitro 9025.
 dental plaque isolates, octenidine dihydrochloride antibacterial activity 3325.
 dental plaque, saliva, man, fluoride effects on 3502.
 dental plaque, surfactants effects on 8759.
 dextranucrase inhibitors, nbotin structure 3686.
 dextranucrase, purification, characterization 55.
 extracellular polysaccharides, carbohydrate composition 8326.
 fermentation, association, formate acetyltransferase 1.
 glucokinase, purification, characterization 6419.

- Streptomyces aureofaciens**, (continued)
 patricin biosynthesis, structure 1664.
 tetracycline biosynthesis, fermenters aeration 8870.
- Streptomyces aureus**,
 trostin A, binding adenine, guanine, N.M.R. 8030.
- Streptomyces avermitilis**,
 avermectin, inhibition reproduction, pest control, *Solenopsis invicta* 1964.
- Streptomyces aureus**,
 antibiotic resistance, genes, cloning, characterization 1521.
- Streptomyces bikiniensis**,
 N-methyl-N'-nitro-N-nitrosoguanidine induction mutation, effects on streptomycin biosynthesis, antibiotic resistance 5256.
- Streptomyces botrytis**,
 (-)-cis-carveol conversion, (4R,6R)-(+)-8,8-oxido menth-en-9-ol production 3732.
- Streptomyces cacaoli**,
 mutants, penicillins antibiotic resistance, role, penicillin-binding protein 3297.
 neopolyxins multiple forms, isolation, characterization 7288.
- Streptomyces calvus**,
 adiposin biosynthesis 2568.
 adiposin, isolation, physicochemical properties 5277.
 adiposin-1, synthesis 7282.
- Streptomyces canarius**,
 saphenamycin biosynthesis, biological properties, structure, physicochemical properties 1658.
- Streptomyces candidus**,
 glycoproteins, antibiotic A35512B, structure, N.M.R. 8027.
- Streptomyces canula**,
 antibiotic CC-1065, biosynthesis 1656.
- Streptomyces carnositatus**,
 neocarzinostatin, radioimmunoassay 9202.
- Streptomyces catiia**,
 differentiation, thienamycin biosynthesis, factors affecting 6184.
 metabolites production, balance studies 7997.
- Streptomyces chartreusis**,
 cephamycins, isolation, structure 6136.
 cezumycin biosynthesis 2597.
 ionophore A23187 biosynthesis 3447.
- Streptomyces chibensis**,
 biodegradation, crop residues, *Oryza sativa* 168.
- Streptomyces cinerascens**,
 mycelia, cinnopropin isolation, physicochemical properties 6236.
- Streptomyces cinnamocroatus**,
 conversion, 2'-demethoxydehydro-griseofulvin, stereospecificity 8007.
- Streptomyces cinnamomeus**,
 interaction, *Glomus fasciculatus*, effects on, *Eleusine caracana*, growth 2341.
- Streptomyces cinnamomeus**,
 kirothrin characterization 1665.
 phospholipase D chromatography 28.
- Streptomyces cinnamomalis**,
 biosynthesis, monensin A, monensin B 8885.
 monensin biosynthesis, nutrient requirements, valine, isoleucine 8016.
 phenazine, biosynthesis 8034.
 plasmid pSM1 role, monensin biosynthesis 2744.
- Streptomyces citratus**,
 cirratomycin A, cirratomycin B, biosynthesis, physicochemical properties, antibacterial activity 765.
 cirratomycin A, cirratomycin B, structure 2578.
 cirratomycin A, cirratomycin B, structure, N.M.R. 764.
- Streptomyces clavuligerus**,
 S-(2-aminoethyl)-L-cysteine resistant mutant, association, β -lactam antibiotics biosynthesis, aspartate kinase regulation 8809.
 antibiotic Ro 22-5417 biosynthesis 6201.
 antibiotic Ro 22-5417, biosynthesis, structure 6197.
 antibiotic Ro 22-5417 stereochemistry 6193.
 cell-free system, cephalosporins biosynthesis 1613.
 cell-free system, high-performance liquid chromatography, methodology 1797.
 penicillin N purification, high-pressure liquid chromatography methodology 9036.
- Streptomyces coelicolor**,
 antibiotic resistance, nutrition, genes, cloning 1523.
 antibiotics biosynthesis stability SCP2 plasmid mediated 1621.
 factor A biosynthesis, genetic analysis 9219.
 glycerol kinase, glycerol-3-phosphate dehydrogenase, assays 7310.
 +Streptomyces olivaceus, interspecific hybridization, antibiotic resistance, antibacterial activity 9716.
- Streptomyces coeruleoaurantiacus**,
 production, amicitin, nebramycin, isolation, characterization 1676.
- Streptomyces coeruleoaurantiacus** sp.nov.,
 amycetin, nebramycin, biosynthesis 2588.
- Streptomyces coeruleorubidus**,
 anthracyclines transformation 782.
 mutants, anthracycline antibiotics biosynthesis 5540.
- Streptomyces coeruleus**,
 antitumor antibiotics, isolation, structure 1647.
- Streptomyces collinus**,
 ansathenins, components, physicochemical properties 7174.
 antibiotic A-19009, structure, antiprotzoal activity, *Trichomonas vaginalis* 8916.
- Streptomyces corchorali**,
 α -amylase inhibitor, purification, characterization 6387.
- Streptomyces cremus**,
 mutants, auxotrophs, nebramycin biosynthesis, antibiotic resistance 8020.
 thienamycin biosynthesis, media optimization 6227.
- Streptomyces diastatochromes**,
 concanamycins, structure 3448.
- Streptomyces echinatus**,
 echinomycin biosynthesis quantification, disc-diffusion test 4428.
 streptomycin characterization, reviews 8896.
- Streptomyces elizabethii**,
 actinomycin IV, actinomycin V, isolation, characterization 4420.
- Streptomyces erythraeus**,
 antibiotic resistance, genes, cloning, characterization 1521.
 erythromycin A biosynthesis, erythronolide A glycosylation 6168.
 erythromycin antibiotic resistance, association adenine dimethylation 638.
 erythromycin production, propanol requirements 6171.
 trypsin-like enzyme, interaction ovumucoid, *Coturnix japonica* 6481.
- Streptomyces erythromyces** sp.nov.,
 daunomycin transformation, antibiotic synergism, antibacterial activity 675.
- Streptomyces erythraeus**,
 liquid culture, erythromycin effects on 8005.
- Streptomyces exfoliatus**,
 endo-1,4- β -D-xylanase, exo-1,4- β -D-xylosidase, purification, characterization 6550.
- Streptomyces faciens**,
 protoplasts regeneration, relationship macrolide antibiotics biosynthesis 6166.
- Streptomyces fimbriatus**,
 biosynthesis, 1,3-dihydroxy-8-decen-5-on, characterization, antifungal activity, antibacterial activity 9201.
- Streptomyces flavogriseus**,
 cellulolytic enzymes, cellulase characterization 4679.
 comparison, *Streptomyces*, strains, β -D-glucosidase, activity 8290.
- Streptomyces flavotriclini**,
 streptothricin resistance 9643.
- Streptomyces flavovirens**,
 antibiotic J120-B biosynthesis 1670.
- Streptomyces flocculus**,
 streptomycin characterization, reviews 8896.
- Streptomyces fradiae**,
 antibiotic resistance, genes, cloning, characterization 1521.
 endopeptidase, purification, characterization 6473.
 macrolide antibiotics biosynthesis, role, valine 8820.
 macrolide antibiotics biosynthesis, structure 6212.
 mutants, growth, cyclic AMP, relationship, tylosin, biosynthesis 4398.
 neomycin biosynthesis, plasmids 6160.
 proteinase, immobilized enzymes, hydrolysis 6482.
 proteolytic enzymes biosynthesis 8293.
 protoplasts regeneration, relationship macrolide antibiotics biosynthesis 6166.
 resistant mutant, butirosin A acetylation 5164.
 tylosin, biosynthesis 6196.
 tylosin biosynthesis pathway 3434.
 tylosin, production, batch culture, glucose, monosodium glutamate, stimulation 4425.
 xylose isomerase, immobilization, use, Sepharose-6MB 9147.
- Streptomyces galilaeus**,
 anthracyclines transformation 782.
 auramycin G, sulfamycin G, isolation, characterization, antibacterial activity 1673.
 mutants, anthracycline antibiotics biosynthesis 5540.
 mutants, anthracycline antibiotics biosynthesis, structure 5539.
 mutants, anthracycline antibiotics, isolation, characterization 438.
 mutants, biosynthesis, anthracyclones, anthraquinones 2823.
- Streptomyces glaucosens**,
 production, hydroxystreptomycin, antibiotic resistance, streptomycins 4382.
- Streptomyces globisporus**,
 mutanolysin, Streptococcus treatment, protoplasts formation, dairy industry 5414.
- Streptomyces griseoflavus**,
 resistance, biosynthesis 8887.
- Streptomyces griseofuscus**,
 immobilization, flocculation, surface charge, γ radiation effects on 7250.
- Streptomyces griseolus**,
 snifungin, inhibition, *Lycopodium esculentum*,
 1-aminocyclopropane-1-carboxylate synthase, ripening 7593.
- Streptomyces griseoporeus**,
 α -amylase inhibitor, purification, characterization 6515.
- Streptomyces griseoviridis**,
 proline hydroxylation mutants, viridigrisein analogs production 8911.
- Streptomyces griseus**,
 ammonium stimulation streptomycin biosynthesis 7150.
 liquid culture, phosphates nutrient deficiencies, streptomycin production 4383.
 biosynthesis, streptomycin, antibiotic resistance, factors affecting, inactivation, enzymes 1547.
 differentiation regulators, anthracycline antibiotics production, screening projects 3602.
 dihydrovindoline demethylation 7541.
 7-ethoxycoumarin biotransformation, production, 7-hydroxycoumarin, 7-hydroxy-6-methoxycoumarin 7493.
 factor A biosynthesis, genetic analysis 9219.
 isolation, structure, cephalosporin, derivatives 6139.
 NAD(P)⁺ nucleosidase biosynthesis, methanol, ethanol, effects on 2797.
 narayamycin B, isolation, identification, activity 5267.
 proteinase, immobilized enzymes, probes, structure, lysozyme, casein 61.
 proteinase, immobilized enzymes, stability, urea denaturation 63.
 proteinase, purification, characterization 6476.
 proteolysis, streptomycin biosynthesis 9760.
 sporulation, liquid culture, induction, methodology 9042.
 storage conditions, effects on, viability, grisin production 8120.
 streptomycin biosynthesis, phosphate, asparagine, effects on 7151.
 streptomycin biosynthesis, role, alkaline phosphatase 2557.
 streptomycin biosynthesis, UDP-N-methyl-D-glucosamine phosphate intermediates 3412.
 streptomycin biosynthesis, 2-(6-methylheptanoyl)-3-hydroxymethyl-4-butanolide induction 5255.
 streptomycin, fermentation, phosphate, release 8003.
 streptomycin 6-kinase, purification, characterization 6522.
- Streptomyces griseus subsp.cryptus**,
 antibiotic C-19393 Es, structure, biological properties 1667.
- Streptomyces hygroscopicus**,
 bialaphos biosynthesis 3716.
 bialaphos biosynthesis, carbon+phosphorus bonds 2824.
 cell culture, mathematical models, identification, growth curves 3580.
 demethylcyarapamycin biosynthesis 6209.
 mutants, bialaphos biosynthesis, phosphonic acid derivatives roles 4570.
 protoplasts, cell fusion, bialaphos, biosynthesis 9781.
 tunimycin, biosynthesis, continuous culture, genetic analysis 762.
 tunimycin production, phosphate requirements 3439.
- Streptomyces hygroscopicus subsp.aureolacrimosus**,
 milbemycin J, milbemycin K, biosynthesis, physicochemical properties 8901.
 milbemycin, biosynthesis 9787.
 milbemycins biosynthesis, isolation, Physicochemical properties 8900.
- Streptomyces hygroscopicus subsp.hisatsensis**,
 antibiotic OA-7653, purification, characterization, antibacterial activity, Mycobacterium, gram-positive bacteria 7179.

- Streptomyces hygroscopicus var. crystallogenes**, copiamycin structure 3445.
- Streptomyces kasugaensis**, DNA cloning methodology 6313.
- Streptomyces lavendulae**, factumycin isolation, antibacterial activity 3436.
- salframycin R, isolation, characterization, antitumor activity 2830.
- Streptomyces levis**, levorin biosynthesis, aromatic compounds, amino acids effects on 1662.
- levorin biosynthesis, β -aminobenzoic acid effects on 778.
- yeasts stimulants, effects on biosynthesis, biotin, levorin, coenzyme A 8021.
- Streptomyces longisporeruber**, mycelia, corralomycin isolation 7160.
- Streptomyces longisporus**, antagonism, biological control, Helminthosporium oryzae brown spot, Oryza sativa, Alternaria solani early blight Solanum tuberosum 4105.
- Streptomyces macromomycticus**, macromomycin, auroomycin, C.D., I.R. spectroscopy 2826.
- Streptomyces macronensis**, desertomycin, purification, characterization 4419.
- Streptomyces melanovinaceus**, antibiotic DC-52, biosynthesis, antibacterial activity, antitumor activity 8344.
- antibiotic DC-52, structure 8345.
- Streptomyces mozuensis**, talopeptin, isolation, characterization 923.
- Streptomyces nigrescens**, proteinase inhibitor, N.M.R., amino acid composition, U.V. spectroscopy 7306.
- Streptomyces nigrificans**, xylose isomerase extraction, methodology comparison 3570.
- Streptomyces nodosus**, amphotericin B biosynthesis, mycelia growth 6181.
- Streptomyces noursei**, nystatin biosynthesis, glucose metabolism effects on 6176.
- Streptomyces novoguineensis**, amipunmycin, structure, mass spectroscopy 7177.
- Streptomyces olivaceogriseus sp. nov.**, biosynthesis, antibiotic FK-156 2592.
- Streptomyces olivaceus**, olivanic acid, derivatives, isolation, physicochemical properties 1663.
- + Streptomyces coelicolor, interspecific hybridization, antibiotic resistance, antibacterial activity 9716.
- Streptomyces omiyensis**, deoxypentalenylglucuron isolation, structure 6192.
- Streptomyces phaseochromogenes**, β -D-fructofuranosidase, immobilized enzymes, sucrose hydrolysis, bioreactors 9265.
- Streptomyces phaseochromogenes**, immobilization, radiation polymerization 9876.
- immobilization, 2-hydroxyethyl methacrylate 9981.
- immobilized cells, enzymes activity, drying 9064.
- Streptomyces phaseochromogenus**, glucosephosphate isomerase, inactivation, potassium thiocyanate, potassium bromide 6512.
- Streptomyces plicatus**, nitrosofungin, synthesis 9791.
- Streptomyces propurpuratus**, + Bacillus, neopurpuratin production, factors affecting 5561.
- Streptomyces pseudovenezuelae**, antibiotic MF722-02, antibacterial activity, gram-positive bacteria, inhibition adenosinetriphosphatase 3422.
- Streptomyces puniceus**, viomycin biosynthesis, viomycin antibiotic resistance 7161.
- Streptomyces purpurascens**, 12-deoxyacardenols conversion 2844.
- Streptomyces purpureus**, uleine transformation 7465.
- Streptomyces ramulosus**, N-acetyl- β -oxytryptamine, N-acetyl- α -hydroxy- β -oxytryptamine, biosynthesis 8342.
- Streptomyces ravidus sp. nov.**, ravidomycin biosynthesis, purification, characterization 6210.
- Streptomyces rectus var. proteolyticus**, subtilisin, substrate specificity 3684.
- Streptomyces ribosidificus**, ribostamycin biosynthesis, transamination, role, neosamine C formation 8909.
- Streptomyces rimosus**, foams suppressors effects on morphogenesis 684.
- grisonin transformation, grisonin, Streptomyces rimosus transformation 4411.
- oxytetracycline biosynthesis, agitation effects on 2563.
- oxytetracycline biosynthesis, foams suppressors effects on 1639.
- oxytetracycline biosynthesis mutants, isolation methodology 9054.
- oxytetracycline biosynthesis, nutrient dynamics association 6183.
- oxytetracycline biosynthesis, temperature effects on 2564.
- oxytetracycline production, aeration 4392.
- primaquine acetylation 7458.
- proteolytic enzymes, fibrinolysis 1947.
- ribonuclease, antiviral activity, foot-and-mouth disease virus, Ayezeku virus 2492.
- ribonuclease, antiviral activity, pseudorabies virus, foot-and-mouth disease virus 6077.
- uleine transformation 7465.
- Streptomyces rimosus var. paramomycinus**, malonomycin, N.M.R. 4405.
- malonomycin biosynthesis, N.M.R. 4406.
- Streptomyces rishirensis**, antibiotic AT-265, structure, antibacterial activity 1672.
- metallic-proteinase inhibitor, purification, characterization 2735.
- metalloproteinase inhibitor, purification, characterization 3692.
- mycotrienins biosynthesis, physicochemical properties 2827.
- mycotrienins biosynthesis, structure 2828.
- mycotrienins, structure 2829.
- Streptomyces rosea var. notonensis**, nanamycin A biosynthesis 3446.
- Streptomyces roseochromogenes**, hydroxylation, 18-hydroxydeoxycorticosterone 2815.
- 1- α -xantholon conversion 2886.
- Streptomyces roseochromogenus**, primaquine acetylation 7458.
- Streptomyces roseoflavus**, proteolytic enzymes, activity 1946.
- Streptomyces rufochromogenes**, streptomycin characterization, reviews 8896.
- Streptomyces sagananensis**, herbicidin A production, conversion, 9- β -D-arabino-furanosyl adenine pathway 4408.
- herbicidin A production degeneration 4335.
- herbicidin biosynthesis, pathways 4418.
- herbicidins, structure 3435.
- Streptomyces scabies**, scab, disease resistance, Raphanus sativus 2268.
- soil bacteriostasis 3179.
- soil isolation 3192.
- Streptomyces setonii**, biodegradation, phenol 2696.
- Streptomyces steffiburgensis**, steffimycinone, antibacterial activity 8775.
- Streptomyces tateyamensis**, thiopeptin structure 8914.
- thiopeptin, structure 8915.
- Streptomyces tauricus**, taumycin A, taumycin B, isolation, characterization 1678.
- Streptomyces tendae**, antibiotics biosynthesis, antibacterial activity, gram-positive bacteria 8878.
- Streptomyces tenebriarius**, antibiotic resistance, aminoglycoside antibiotics 1539.
- tobramycin biosynthesis, elements effects on 2585.
- tobramycin biosynthesis, inoculum effects on 6232.
- Streptomyces tanjariensis**, 2'-N-formimidoylistamycin A, 2'-N-formimidoylistamycin B, biosynthesis 1655.
- Streptomyces tokunonensis sp. nov.**, biosynthesis, N-acetylispopenicillin N, isopenicillin N 3410.
- Streptomyces umbrinus subsp. raffinophilus**, prothracarin biosynthesis, structure, antibacterial activity 1668.
- Streptomyces venezuelae**, chloramphenicol biosynthesis, β -D-glucosidase suppression, association, glucose 2560.
- chloramphenicol biosynthesis, gene mapping 4388.
- chloramphenicol biosynthesis, mechanisms, enzymes association, plasmids role 4457.
- nutrient requirements, chloramphenicol, biosynthesis 6161.
- Streptomyces vinaceus**, antibiotic resistance, genes, cloning, characterization 1521.
- antibiotic resistance, nutrition, genes, cloning 1523.
- Streptomyces violaceus**, biosynthesis, antibiotic FK-156 2582.
- Streptomyces violaceo-ruber**, methylenomycin A biosynthesis, role, plasmid pSV1 763.
- Streptomyces violaceus**, L-glutamate oxidase, purification, characterization 7371.
- Streptomyces virginiae**, declorubacin biosynthesis, antibacterial activity, gram-positive bacteria 6220.
- declorubacin, sugars components, structure 6221.
- Streptomyces viridifaciens**, deoxypentalenylglucuron isolation, structure 6192.
- Streptomyces viridiviolaceus**, xanthine, utilization, biodegradation 5602.
- Streptomyces viridochromogenes**, butyrolactone biosynthesis, inducers 3443.
- immobilized cells, uranium bioaccumulation, sea water 4258.
- Streptomyces viridosporus**, lignin biodegradation 2887.
- vanillin conversion, vanillic acid production 4578.
- Streptomyces xanthochromogenus**, alkaloids, structure 1977.
- Streptomyces xanthophaeus**, streptomycin resistance 9643.
- Streptomyces zalesis**, biosynthesis, antibiotic CC-1065 5541.
- Streptomyacin**, Actinomadura antibiotic sensitivity testing 6109.
- antibacterial activity, Chlamydia 9714.
- antibacterial activity standardization 7071.
- antibiotic resistance, aerobic bacteria, drinking water isolates 1533.
- antibiotic resistance, Bacillus sphaericus, Bacillus licheniformis 9642.
- antibiotic resistance, Escherichia coli, urinary tract clinical isolates 7034.
- antibiotic resistance genes, Escherichia coli, mutants, selection methodology 4481.
- antibiotic resistance markers transformation, taxonomic significance, Acinetobacter calcoaceticus 7905.
- antibiotic resistance, Pseudomonas aeruginosa 7023.
- antibiotic resistance, R factors, Shigella 7044.
- antibiotic resistance, Staphylococcus aureus L form, cell fusion, recombinants 3286.
- antibiotic resistance, Yersinia enterocolitica 2524.
- antibiotic sensitivity testing methodology comparison, gram-negative bacilli 6090.
- antibiotic sensitivity testing, Shigella, antibiotic resistance transfer, Italy 8829.
- antibiotic synergism, antibacterial activity, Mycobacterium intracellulare 3309.
- bacteria urinary tract isolates, antibiotic sensitivity testing, antibiotic resistance 4287.
- biosynthesis, actinomycetes, role nuclease, proteinase, α -amylase 7123.
- biosynthesis, antibiotic resistance, N-methyl-N-nitro-N-nitrosoguanidine induction mutation Streptomyces bikiniensis effects on 5256.
- biosynthesis, Streptomyces griseus, ammonium stimulation 7150.
- biosynthesis, Streptomyces griseus, antibiotic resistance, factors affecting, inactivation, enzymes 1547.
- biosynthesis, Streptomyces griseus, phosphate, asparagine, effects on 7151.
- biosynthesis, Streptomyces griseus, proteolysis 9760.
- biosynthesis, Streptomyces griseus, role, proteinase, alkaline phosphatase 2557.
- biosynthesis, Streptomyces griseus, UDP-N-methyl-D-glucosamine phosphate intermediates 3412.

Streptomycin, (continued)

- ± dimethyl sulfoxide, antimycobacterial activity, *Mycobacterium avium-intracellulare* 2401.
- disc-diffusion test, streptococcus group D 2509.
- disease control, *Pseudomonas syringae* streptomycin, speck, *Lycoersicon esculentum* 5822.
- drug sensitivity testing, *Mycobacterium intracellulare*, infection, monkeys, clinical aspects 4285.
- + EDTA+ tromethamine, antibacterial activity, *Escherichia coli* 8765.
- effects on, *Bordetella pertussis* ultrastructure 1599.
- + ethionium, antibacterial activity, bacteria 1558.
- fermentation, phosphate, release, *Streptomyces griseus* 8003.
- fluorescence polarization, immunoassays 6156.
- + penicillin G treatment, bacteria infection, mammary gland, cattle, isolates susceptibility 8851.
- production, *Streptomyces griseus*, phosphates nutrient deficiencies batch culture 4383.
- resistance, *Escherichia coli*, clinical isolates, British Isles 1540.
- resistance markers transformation, factors affecting, *Acinetobacter calcoaceticus* 7895.
- Rhizobium japonicum antibiotic resistance isolates, Glycine max nodules 651.
- Salmonella clinical isolates, antibiotic sensitivity testing 6112.
- sensitivity, *Streptococcus animal* isolates 5193.
- Streptomyces griseus*, biosynthesis,
- 2-(6-methylheptanoyl)-3-hydroxymethyl-4-butanolide induction 5255.
- Yersinia pestis* antibiotic sensitivity testing 6110.
- Streptomycin 6-kinase**,
- Streptomyces griseus*, purification, characterization 6522.
- Streptomycinase**,
- Streptomyces glaucescens* antibiotic resistance 4382.
- Streptomygrin**,
- bactericidal activity, role, *Escherichia coli* iron uptake 1679.
- characterization, reviews 8896.
- Streptoporphyrin viridogriseum**,
- sporavidin, sugars component structure 8047.
- Streptothricin**,
- antibiotic resistance, *Escherichia coli* 3285.
- characterization, reviews 9782.
- resistance, bacteria 9643.
- antibiotic SC4-X, streptothricins, antibacterial activity, antifungal activity, purification, characterization 7164.
- Streptovorticillium**,
- antibiotic U-0142, monazomycin, physicochemical properties, taxonomic significance 7163.
- Streptovorticillium ashmeae**,
- carbazomycin A, carbazomycin B, biosynthesis 8906.
- Streptovorticillium griseovorticillium**,
- antibiotic U-0142, monazomycin, physicochemical properties, taxonomic significance 7163.
- Streptovorticillium kilasnoensis**,
- leucomycin aglycone biosynthesis 8904.
- macrolide antibiotics biosynthesis, role, valine 8820.
- Streptovorticillium mashuae**,
- antibiotic U-0142, monazomycin, physicochemical properties, taxonomic significance 7163.
- Streptovorticillium olivoreticul subsp. neonecticus**,
- piprazomycin, characterization, antifungal activity 1644.
- Streptoviridin**,
- antiviral activity, oligosaccharides biosynthesis, influenza A virus, influenza B virus, cell culture 6066.
- Strip mines**,
- soil amendment, effects on, spores, vesicular-arbuscular mycorrhizas, ectomycorrhizas, association, Agropyron trachycaulum, Picea glauca 1480.
- Stripe**,
- Cephalosporium gramineum, incidence, agricultural practices, Triticum aestivum 4960.
- Stripe rust**,
- Puccinia striiformis, disease control, sprays, Triticum aestivum 5722.
- Puccinia striiformis, disease resistance, Triticum, genetic analysis 1344.
- Puccinia striiformis, epidemiology, statistical analysis, Triticum aestivum 2125.
- Puccinia striiformis, yield, Triticum aestivum 1165.
- Triticum, germplasm screening, field trials, disease resistance development, India 5726.
- Strobilurin C**,
- biosynthesis, Xerula, structure, antifungal activity 8042.
- Stropharia rugoso-annulata**,
- cultivation, technology, species use, USA, reviews 4825.
- Strophostyles helvola**,
- defoliation effects on, growth, nodulation, nitrogenase activity, Rhizobium leguminosarum nitrogen fixation 5127.
- Structural proteins**,
- poliovirus, separation, high-performance liquid chromatography 7228.
- rubella virus, identification, immunoprecipitation 1740.
- wheat mosaic virus, molecular weight 2117.
- Struvite**,
- precipitation, bacteria, soil isolates 8710.
- Stubomycin**,
- cytolytic activity, yeasts, fungi, mammalian cells 6059.
- Stunt**,
- bacteria, pathology, Ambrosia artemisiifolia, vectors 8576.
- grassy stunt virus, disease transmission, Nilaparvata lugens, Oryza sativa 4952.
- maize chlorotic dwarf virus, Zea mays, Graminella nigrifrons vectors, sex differences 5697.
- mycoplasma-like organisms, diagnosis, fluorescence, Apium 2166.
- mycoplasma-like organisms, disease transmission, Allygus mayri vectors, Rubus 2169.
- mycoplasma-like organisms, Philaenus spumarius vectors, Rubus 3057.
- mycoplasma-like organisms, Vaccinium corymbosum 5010.
- RNA, viruses, Arctium tomentosum, Arctium lappa, etiology 4021.
- spiroplasma, enzyme-linked immunosorbent assay detection, Zea mays 3011.
- Vitis vinifera, relationship, methyl bromide soil fumigation effects on mycorrhizas 5987.
- Stylosanthes guianensis**,
- leaves lesions, Curvularia eragrostidis 3991.

Styrene,

- biodegradation, pathways, *Pseudomonas fluorescens* 8433.
- dimers, biodegradation, Alcaligenes, *Pseudomonas* 7558.
- Styryl cyanine dyes**,
- bactericidal activity, fungicidal activity, bacteria, fungi 9703.
- Sub-alpine environments**,
- lundra, mycorrhizas, biomass 5883.
- Submergence**,
- fungi, water pollution effects on 8977.
- 3-Substituted benzofuryl 4-aryazo-5-pyrazolone**,
- derivatives synthesis, antibacterial activity 8757.
- Substituted pyridol 2,3-b-pyrazine-1,4-dioxide**,
- synthesis, antibacterial activity, Enterobacteriaceae 2437.
- 4-Substituted 5-amino-5-hydroxybenzoic acid**,
- rfamycins derivatives biosynthesis, *Nocardia mediterranei* 1628.
- Substituted 4(3H)-quinazoline**,
- derivatives, antibacterial activity, antifungal activity 5223.
- Substrate preferences**,
- Ascomycetes, India 7645.
- Substrate specificity**,
- Actinomycetes, acylase biosynthesis 975.
- Clostridium histolyticum collagenase 6412.
- glycerophospholipid-cholesterol acyltransferase, *Aeromonas salmonicida* 1884.
- β -lactamase identification, bacteria, β -lactam antibiotics 9728.
- Substrates**,
- glucose concentration, relationship ethanol inhibition, *Saccharomyces cerevisiae*.
- Saccharomyces bayanus* 2870.
- methanol, *Methylomonas clara*, single-cell protein production 3659.
- polystyrene, bacteria cell adhesion, measuring techniques, use, bioluminescence 4489.
- retention, relationship, bacteria levels, pigs animal wastes digestion (anaerobic) 9808.
- utilization, fungi, bacteria, reviews 6655.
- Subterranean clover red leaf virus**,
- infection, Pisum sativum, purification, characterization 1146.
- Subtilisin**,
- conformation, C.D., fluorescence, *Bacillus subtilis* 90.
- conformation, pH, urea effects on, C.D., fluorescence, kinetics, *Bacillus subtilis* 89.
- ethanol, glycerol, sucrose stabilization, *Bacillus subtilis* 5503.
- proteolysis citrate (ai)-synthase, effects on allosteric properties, *Acinetobacter calcoaceticus* 4677.
- substrate specificity, *Streptomyces rectus* var. proteolyticus 3684.
- subtilisin inhibitor complex, dissociation, polarography, *Streptomyces* 6518.
- Subtilisin inhibitor**,
- N.M.R., *Streptomyces* 4587.
- Streptomyces*, dimers dissociation 917.
- subtilisin complex, dissociation, polarography, *Streptomyces* 6518.
- Subunit association**,
- alkaline phosphatase, *Escherichia coli*, formamide effects on, metals role 2770.
- Subunit structure**,
- amine dehydrogenase, *Thiobacillus. Methylophilus methylotrophus* 64.
- Escherichia coli* enterotoxins, immunochemistry 291.
- phosphocarrier protein, active sites, *Staphylococcus aureus* 4.
- toxins, *Bordetella pertussis* 302.
- Succession**,
- microorganisms, leaf litter decay, polar environments, lakes 1061.
- soil microorganisms, nutrient cycles, forests, montane environments 2297.
- trees, association nitrification, forests 4140.
- Succinate dehydrogenase**,
- Escherichia coli*, outer membranes, antibacterial activity, glycerol monooxypate 4290.
- purification, characterization, *Escherichia coli* 1912.
- Succinic acid**,
- metabolism, menaquinones biosynthesis, *Micrococcus luteus* membranes 2839.
- Succinoglycans**,
- decomposition, *Cytophaga arvensicola* sp. nov. 4764.
- Succinyl-CoA synthetase (ADP-forming)**,
- Saccharomyces cerevisiae*, purification, characterization 7362.
- Succinyl-CoA synthetase (GDP-forming)**,
- isolation, characterization, *Thermus aquaticus*, *Halobacterium salinarum* 5497.
- Sucrose**,
- association, fruit juices, yeasts heat inactivation 2039.
- association, Rhizobium lupini amino acids biosynthesis 8199.
- blood culture, effects on detection, clinical isolates, yeasts, bacteria 9955.
- blood culture, media (culture), effects on bacteria isolation 9930.
- fermentation, *Clostridium* 2057.
- fermentation, *Zymomonas mobilis* immobilized cells, levan production association 9192.
- hydrolysis, glucose, effects on, *Zymomonas mobilis* 6654.
- hydrolysis, immobilized enzymes, bioreactors 9265.
- hydrolysis, *Saccharomyces cerevisiae*, immobilized cells 3827.
- levels effects on, *Salmonella senftenberg*, heat resistance, liquid culture 670.
- stabilization subtilisin, *Bacillus subtilis* 5503.
- uptake, *Candida intermedia*, fermentation 128.
- use, fructose production, *Fusarium*, *Mucor* 6572.
- Sucrose α -D-glucosylolase**,
- Zymomonas mobilis*, production, characterization 9135.
- Sucrose phosphorylase**,
- Leuconostoc mesenteroides*, production 4671.
- Sucrose-6-phosphate hydrolase**,
- purification, characterization, *Streptococcus mutans* 6414.
- Sudan**,
- Allium cepa pink root, new records 1277.
- Sugar**,
- fermentation, lactic acid bacteria, starter cultures, soybean milk 6674.
- fermentation, *Saccharomyces cerevisiae* petite mutant ability 9247.
- hydrolysis, *Aspergillus niger* polygalacturonase 4664.
- inhibition, bacteria growth, association, wound infection treatment, man, in vitro 7056.
- production, *Clostridium thermocellum*, comparison, mesophilic bacteria, cellulose biodegradation 9251.

- Sugar beets**, cellulose, *Talaromyces emersonii* cellulase hydrolysis 9153.
industrial wastes, use, *Trichoderma reesei* protein biosynthesis, animals feeds 8493.
- Sugar cane mosaic virus**, infection, Zea mays, transmission, symptoms, control 5723.
- Sugar fungi**, surveys, soil microorganisms, Syria 7814.
- Sugarcane**, bagasse, cellulolytic bacteria growth, proteins products nutritive value 9287.
- Sugarcane mosaic virus**, infection, Gramineae susceptibility, USA, Mississippi 8559.
survival, *Saccharum officinarum* tissue culture 1154.
- Sugars**, cell walls, bacteria, gas chromatography 9677.
component, sporoviridin structure 8047.
components, decolorubion, structure 6221.
concentration, *Brassica juncea*, white rust resistance 5769.
consumption, oral hygiene, relationship dental caries, children 8991.
fermentation, ethanol production, biomass conversion, conferences 10010.
fermentation, ethanol production, *Torulopsis holmii* 3747.
fermentation, relationship, esters equilibrium, role, 2860.
fermentation, yeasts, biosynthesis, ethanol, glycerol 7525.
food industry, contamination, bacteria, fungi 184.
metabolism, *Candida tropicalis*, single-cell protein production, crop residues, *Oryza sativa* 9109.
metabolism, glucokinase, fructokinase, characterization, *Zymomonas mobilis* 105.
Poa pratensis, *Drechslera sorokiniana* pathogenesis, herbicides effects on 5718.
production, biomass hydrolysis, enzymatic activity, yeasts 5535.
yoghurt fermentation, mixed culture, *Lactobacillus bulgaricus* + *Streptococcus thermophilus*, effects on 3829.
- Sulfites**, host specificity, fungi mycorrhizas 5901.
- Sulfites luteus**, blister rust, infection monitoring, chitin, mannans, levels, *Pinus sylvestris* 3170.
- Sulfobactrum**, antibacterial activity, *Escherichia coli*, Enterobacteriaceae 2545.
binding penicillin-binding protein, effects on antibacterial activity 7134.
inactivation, *Citrobacter freundii* β -lactamase 7180.
- Sulfadimethoxine**, bacteriostasis, *Mycobacterium avium*-intracellulare 7912.
- Sulfamethoxazole**, antibacterial activity, nasopharynx isolates 7066.
antibiotic resistance, *Yersinia enterocolica* 2524.
in vitro antibacterial activity, McCoy cells, *Chlamydia trachomatis* 6008.
+ketoonazole, antifungal activity, *Candida albicans* 2483.
Mycobacterium infection, in vitro antibacterial activity 6034.
- Sulfanilamide**, antibiotic resistance, R factors, *Shigella* 7044.
+ β -lactam antibiotics, +thiazolidinone, synthesis, antibacterial activity 4294.
- Sulfanylamide**, derivatives, antibacterial activity, structure-activity relationships 2436.
- Sulfate**, gluconide, biosynthesis, association, aromatic compounds oxidation, *Gunninghamella elegans* 2391.
metabolism, soil, forests ecosystems 5102.
reduction, sulfate-reducing bacteria, measuring techniques 7244.
- Sulfate reduction**, bacteria, media, enumeration 2689.
- Sulfate-reducing bacteria**, antibacterial agents evaluation, radiorespirometry methodology 6320.
contamination, petroleum 5140.
contamination, wells, ground water 3488.
fouling organisms, antibacterial activity, antifouling substances, metals, sea water 151.
incidence, soil, tropical environment 3178.
nitrogen fixation, rhizosphere sediments, *Zostera marina* 2356.
soil amendment, fertilizers, manure, redox potential, paddy fields, *Oryza sativa* 9623.
sulfate reduction, measuring techniques 7244.
sulfur nutrient cycles, paddy fields, flooded soils 6958.
- Sulthydryl groups**, gramicidin S synthetase, chemical modification, *Bacillus brevis* 6494.
thermolase, active sites, chemical modification, *Thermoactinomyces vulgaris* 3685.
- Sulfide**, leaching, bacteria 9627.
- Sulfite**, conversion, soil microorganisms, *Picea* forests soil 6903.
industrial wastes, *Candida* biodegradation 2904.
sulphite reductase (NADPH) complex formation, hemoproteins subunits, *Escherichia coli* 2783.
- Sulfochloranthine**, effects on, protein biosynthesis, DNA biosynthesis, RNA biosynthesis, *Escherichia coli* 2456.
- S-Sulfo cysteine**, use, *Cephalosporium acremonium*, association, cephalosporin C biosynthesis 733.
- Sulfolobus acidocaldarius**, ferredoxin, purification, characterization 922.
sulfur removal, fermenters, coal 3254.
- Sulfonamide**, susceptibility, association, cotrimoxazole drug resistance, Enterobacteriaceae 6004.
- Sulfonamides**, antimycobacterial activity 2420.
+bromidoprim, +metoprim, antibacterial activity, anaerobic bacteria 3320.
drug resistance mechanisms, bacteria 6000.
drug sensitivity testing, agar diffusion test, *Mycobacterium* 9657.
inhibition, carbonate dehydratase, bacteria, reviews 8756.
sensitization, *Haemophilus parahaemolyticus* animal isolates 5189.
synergism, trimethoprim, antibacterial activity, pharmacokinetics 4289.
- Sulfoquinovose**, sulfur, mineralization, soil microorganisms, soil, forests, USA, North Carolina 6904.
- Sulfur**, compounds, petroleum, biodegradation, bacteria 5597.
containing compounds, antifungal activity, antibacterial activity 7959.
conversion, soil, *Thiobacillus thioarum*, *Desulfovibrio*, continuous culture 7793.
deficiency, association, *Aspergillus candidus* extracellular proteolytic enzymes biosynthesis 1933.
deficiency, *Medicago sativa*, relationship infection, *Cylindrocarpum gracile*, *Fusarium roseum* 7658.
disease control, root rot, *Beta vulgaris* 3157.
Escherichia coli, association biotin biosynthesis 2843.
fertilizers, effects on, *Rhizobium* nodulation, leguminosae ethylene biosynthesis 1503.
foliar applications, disease control, *Erysiphe polygoni*, powdery mildew, *Beta vulgaris* 5823.
fungicides, disease control, *Pisum sativum*, powdery mildew, *Erysiphe polygoni* 4123.
levels, nitrogenase cofactors, *Clostridium pasteurianum* 4593.
metabolism, association, monobactams, biosynthesis, *Chromobacterium violaceum*, *Acetobacter*, *Agrobacterium radiobacter* 5266.
metabolism, *Pseudomonas desmolyticus*, petroleum biodegradation 5991.
mineralization, soil microorganisms, nutrient cycles, soil 6996.
nutrient availability, soil microorganisms, leaf litter decomposition, acid rain, pollution effects 9507.
nutrient cycles, sulfate-reducing bacteria, flooded soils, paddy fields 6958.
oxidation, solid wastes, microorganisms 3471.
polysaccharides, carbohydrate composition, *Arthro bacter* 2818.
removal, *Sulfolobus acidocaldarius*, fermenters, coal 3254.
sulfoquinovose, mineralization, soil microorganisms, soil, forests, USA, North Carolina 6904.
- Sulfur bacteria**, iron (III) reduction 3257.
petroleum biodegradation 2015.
- Sulfur dioxide**, air pollution, effects on early blight, *Lycopersicon esculentum* 6819.
air pollution, effects on soil microorganisms, forests 5854.
association, straw biodegradation, hydrolysis, rumen microorganisms 4751.
corn, post-harvest decay, effects on, fungi, bacteria 6836.
effects on fermentation, yeasts 1036.
formation, *Saccharomyces uvarum*, dissolved oxygen effects on, fermentation, wort 7518.
fumigation, effects on *Botrytis cinerea* post-harvest decay, grapes 2905.
+pH, effects on, *Leuconostoc oenos*, fermentation, wine 3761.
Phaseolus vulgaris, effects on *Xanthomonas phaseoli* pathogenicity 334.
Saccharomyces cerevisiae cell death 1563.
tolerance, yeasts pure culture, hybridization selection, wine fermentation 147.
- Sulfurmycin G**, isolation, characterization, antibacterial activity 1673.
- Sulphadimidine**, sensitivity, *Streptococcus animal* isolates 5193.
- Sulphamethoxazole**, susceptibility, *Escherichia coli*, statistical analysis methodology 1795.
- Sulphite reductase**, purification, characterization, *Thermosulfobacterium commune* 3664.
- Sulphite reductase (NADPH)**, siroheme, iron-sulfur centers interaction, E.S.R., *Escherichia coli* 2807.
sulfite, nitrite complex formation, hemoproteins subunits, *Escherichia coli* 2783.
- Sulphonamides**, resistance, *Escherichia coli*, clinical isolates, British Isles 1540.
- Sunlight**, stimulation, PCB biodegradation, bacteria, rivers sediments isolates 8421.
- Sunn hemp rosette virus**, antiviral activity, *Datura metel* plant extracts, foliar application, *Crotalaria juncea* 7771.
antiviral activity, 1-aryl-3-[3-(nitro-4'-methoxyphenyl)-5-phenyl formazan, 3-aryl-5-[3-(nitro-4'-methoxyphenyl)-2-phenyl tetrazolium bromide 6082.
- Superoxide**, radicals formation, role sporidesmoxins toxicity, in vitro 274.
radicals, reduction putidaminoxin, kinetics, *Pseudomonas putida* 2790.
- Superoxide dismutase**, activity, *Agrobacterium tumefaciens*, in vitro, in vivo, *Bryophyllum calycinum* crown gall 5013.
amino acid sequence, *Saccharomyces cerevisiae* 27.
biosynthesis, *Azospirillum brasilense* continuous culture, oxygen tension effects on 2749.
kinetics, pulse radiolysis, *Paracoccus denitrificans* 6540.
purification, characterization, *Saccharomyces cerevisiae* 25.
quaternary structure, X-ray crystallography, *Escherichia coli* 6537.
quaternary structure, X-ray crystallography, *Pseudomonas ovalis* 6561.
redox-potential, *Escherichia coli*, *Azotobacter vinelandii*, *Pseudomonas putida* 4588.
structure, E.S.R., *Saccharomyces cerevisiae* 6470.
- Superoxides**, anions, biosynthesis, *Methanobacterium formicicum* 3734.
- Supplements**, nutrients, *Saccharomyces cerevisiae* nutritive value, association, *Brachionus plicatilis* population growth 7604.
- Suppression**, β -D-glucosidase, association, glucose, *Streptomyces venezuelae*, chloramphenicol biosynthesis 2560.
- Suppressors**, foams, effects on *Streptomyces rimosus* morphogenesis 684.
foams, effects on *Streptomyces rimosus* oxytetracycline biosynthesis 1639.
- Surface charge**, filters, viruses recovery, drinking water, sewage 8096.
immobilized enzymes, effects on reaction mechanisms 967.
Streptomyces griseofuscus, flocculation, γ radiation effects on, immobilization 7250.
- Surface tension**, measuring techniques, bacteria, excretion, surfactants, effects on, agar, mathematical models 5378.
- Surface water**, contamination, viruses, German Dem. Rep. 3477.
microbial pollution, indicator species, coliforms, *Escherichia coli* 1708.
microbial pollution, pollution monitoring, methodology, *Salmonella* 8117.
USA, Washington, microbial pollution 2827.
water quality, streams, environmental impact, cattle, grazing, USA, Colorado

- Surface water, (continued)**
8973.
- Surfaces,**
Brassica seeds, bacteria, factors affecting 4793.
cations binding, antimicrobial activity 3373.
contamination, coliforms, institutions, children 3494.
disease transmission, rhinovirus, man 804.
glass, bacteria removal 4456.
- Surfactants,**
antibacterial activity, Enterobacteriaceae, effects on Hly plasmid 4296.
antibacterial activity, use, media (isolation), Salmonella, meat 233.
Aspergillus, effects on aspartic proteinase production 7094.
bacteria, excretion, effects on, agar, surface tension, measuring techniques, mathematical models 5378.
biodegradation, Bacillus, Pseudomonas, in vitro 8432.
biodegradation, estuaries 5596.
biodegradation, microorganisms 9255.
effects on dental plaque Streptococcus mutans, Streptococcus sanguis 8759.
- Suspension culture,**
bacteria, density, solid phase methods 4501.
- Suspensions,**
yeasts volume association, measuring techniques 9089.
- Suspecta,**
semen, bacteria, antibacterial activity, antibiotics 715.
- SV40,**
mRNA, isolation, membrane filtration, transformed cells 829.
transformation, use, Xeroderma pigmentosum cell lines methodology 9668.
- Swabs,**
culture methodology, Mycobacterium tuberculosis 869.
enumeration, methodology, cattle carcasses, bacteria contamination 5404.
transport methodology, anaerobic bacteria, aerobic bacteria 2685.
transport system, anaerobic bacteria survival, temperature association 6334.
transport systems, anaerobic bacteria recovery 6333.
- Swainsonia leiserifolia,**
Australia, Rhizobium isolation, characterization 6990.
- Swainsonia,**
effects on, Vesicular stomatitis virus, glycoproteins, oligosaccharides, structure 4314.
- Sweden,**
Cryptosporidiosis fetus subsp. jejuni, enteritis, man, epidemiology, food contamination 2055.
forests, leaf litter decomposition, nutrient dynamics, Pinus silvestris 2300.
soil, heavy metals gradients, respiration, fungi population dynamics association 6383.
- Sweet potatoes,**
ethanol fermentation methodology 5569.
ethanol fermentation, use, Endomycopsis fibuligera exo-1,4- α -D-glucosidase 9230.
- Sweeteners,**
 α -L-aspartyl-L-phenylalanine methylester, organoleptic evaluation, spoilage, beverages 3803.
- Swimming,**
man, association Norwalk agent infection, disease transmission, epidemiology 1710.
man, gastroenteritis, association Norwalk agent infection, epidemiology 1709.
recreation sites, microbial pollution, phages, Escherichia coli 8970.
- Switzerland,**
clinical surveys, incidence, bacteria antibiotic resistance, aminoglycoside antibiotics 6003.
- Swollen shoot virus,**
infection, yield, Cacao 391.
- Symbiosis,**
agricultural practices, research programs, Leguminosae, Rhizobium, Latin America 3227.
Agropyron trachycaulum, vesicular-arbuscular mycorrhizas, mines soil+soil amendment 4203.
Allium cepa, Glomus, growth association 9549.
Azotobacter chroococcum, Cyperus rotundus 5948.
Cenococcum geophilum, Tilia cordata, morphology 4207.
development, endomycorrhizas, Rhododendron ponticum, structure 3199.
ectomycorrhizas, Cistaceae, Tuberales, incidence 4210.
ectomycorrhizas, Tsuga heterophylla, relationship, survival, association, wood 3164.
Elaphomyces personii, Vaccinium ashei, USA, Florida, factors affecting 4192.
Fraxinus pennsylvanica, vesicular-arbuscular mycorrhizas, growth association 4205.
Glomus epigaeum, Malus, effects on growth 5097.
Glomus fasciculatus, Ornithogalum umbellatum, cell walls structure 6357.
Glomus fasciculatus, Sorghum vulgare, light effects on 2331.
Glomus mosseae, Hedysarum coronarium, growth, Italy 6975.
Glomus mosseae, Lactuca sativa, nitrate, phosphate, effects on 5903.
Glomus mosseae, Zea mays, nitrate soil amendment, foliar applications, effects on 4204.
Glomus tenuis, interaction, Glomus monosporus, vesicular-arbuscular mycorrhizas 6944.
Hedysarum coronarium, Rhizobium, nitrogen fixation, Israel 5947.
mycorrhizas, Arbutus menziesii, Arctostaphylos manzanita, USA, California 4196.
mycorrhizas, Cymbidium, Cattleya, greenhouses 9562.
mycorrhizas, effects on, Sophora secundiflora, seedlings growth, phosphorus uptake 583.
mycorrhizas, silviculture 2304.
mycorrhizas, trees, screening 3162.
mycorrhizas, trees, shrubs, Tanzania forests 2296.
mycorrhizas, Trifolium subterraneum, effects on nitrate reductase (NADH) 6997.
nitrogen-fixing bacteria, Cratylia floribunda, growth stage effects on 3232.
nitrogen-fixing bacteria, Zea mays, screening 7008.
Pisum sativum, Rhizobium leguminosarum, hydrogen recycling effects on nitrogen fixation 3229.
plants, endomycorrhizas, +methyl bromide fumigation, growth association, field trials 5910.
population growth, wastewater treatment ponds, algae, bacteria 2605.
Rhizobium, Clostridium, effects on nodules 5966.
Rhizobium japonicum, characterization, Vigna unguiculata, Macroptilium atropurpureum, Glycine max 8700.
Rhizobium japonicum, Glycine max, nodulation, photosynthesis, nitrogen cycle 8701.
- Symbiosis, (continued)**
Rhizobium japonicum, Glycine max, roots temperature effects on 6940.
Rhizobium japonicum, Glycine max, salinity effects on nitrogen fixation 7830.
Rhizobium japonicum, Heterodera glycines, genetic analysis, Glycine max 6998.
Rhizobium japonicum, host specificity, Glycine max 2369.
Rhizobium leguminosarum, nitrogen fixation, Pisum sativum 7852.
Rhizobium, Lens culinaris, salinity tolerance effects on 5955.
Rhizobium meliloti, Medicago sativa, acetylene reduction 2374.
Rhizobium phaseoli, Glomus fasciculatus, nitrogen fixation, phosphorus uptake, Phaseolus vulgaris 1502.
Rhizobium trifolii, Trifolium repens, nitrogen fixation 7003.
Rhizoctonia goodyerae-repentis, Goodyera repens, roots, mycorrhizas 4201.
Trifolium repens, Rhizobium trifolii, soil pH, acidity, effects on, measuring techniques 4235.
vesicular-arbuscular mycorrhizas, colonization, Gramineae, Pisum sativum 5902.
vesicular-arbuscular mycorrhizas, plants, use, agricultural practices, reviews 4188.
Vitis vinifera, Glomus fasciculatus, relationship, hyphae structure, biochemical characteristics 4183.
- Syncephalastrum racemosum,**
lipase, production, factors affecting 6558.
- Synchytrium,**
canker, Cucumis melo var. mamordica, pathogenesis 6782.
canker, Sesamum indicum, pathogenesis, ultrastructure 9439.
- Synchytrium endobioticum,**
sporangia, isolation, methodology 8158.
wart disease, Solanum tuberosum, epidemiology, pathogenesis 8535.
- Synchytrium trichosanthidis,**
canker, Cucumis melo var. mamordica, anatomy analysis 3976.
- Synergism,**
antiviral agents, antiviral activity, herpes simplex virus 1, herpes simplex virus 2 1572.
citrus infection, Geotrichum candidum+Penicillium digitatum 440.
 β -interferon, antiviral agents, antiviral activity, herpes simplex virus 1, Vero cells 697.
 β -lactam antibiotics+antineoplastic drugs, antibacterial activity, gram-negative bacilli 3385.
nuclear polyhedrosis virus+deltamethrin, biological control, Mamestra brassicae, Spodoptera littoralis 9208.
Penicillium digitatum spoilage oranges, association benzimidazole sensitivity 1318.
- Syngonium podophyllum,**
leafspot, Acremonium crotoncingenium, disease control, anilazine 1423.
- Synovial fluid,**
animals, bacteria recovery, media methodology 3609.
- Syntrophobacter wolnini,**
propionic acid metabolism, kinetics, digestion (anaerobic) 8944.
- Syphilis,**
congenital infection, fluorescent antibody test, diagnosis, man 863.
diagnosis, TPHA test, hemagglutination 2665.
immunodiagnosis, fluorescent antibody test 9918.
immunodiagnosis, rapid plasma reagin test 9917.
immunodiagnosis, rapid plasma reagin test, toluidine red unheated serum test 9913.
- Syringacin W-1,**
biosynthesis, Pseudomonas syringae, activity, Phaseolus vulgaris tissues infection 2114.
- Syringalol,**
oxidation, use, Fusarium solani enzymes 4730.
- Syringes,**
injectable vials, medical equipment, bacteria contamination, cost-benefit analysis 9822.
- Syringomycin,**
Pseudomonas syringae pv. syringae, effects on, Zea mays, mitochondria 2966.
- Syringotoxin,**
Pseudomonas syringae pv. syringae, effects on, Zea mays, mitochondria 2966.
- Systems,**
drinking water, fungi incidence 1722.
- Systems ecology,**
soil acidification, nitrogen mineralization, forests, mathematical models 4138.
- Tables,**
contamination, microorganisms, pressure effects on 3459.
fluoride, consumption, children 9000.
metronidazole+spiramycin, antibacterial activity, oral cavity isolates 8864.
parformaldehyde, use, medical instruments sterilization 5228.
- D-Tagatose-1,6-biophosphate aldolase,**
purification, characterization, Klebsiella pneumoniae 6427.
purification, characterization, Staphylococcus aureus 6426.
- D-Tagatose-6-phosphate kinase,**
purification, characterization, Staphylococcus aureus 6443.
- Tagetes,**
Pseudomonas syringae pv. tagetis infection, growth, cultivars, effects on symptoms 2231.
- Tagetes erecta,**
phytoxicity, Alternaria tagetica zinnii 9392.
- Tagetes patula,**
endomycorrhizas colonization, growth, phosphorus nutrient availability effects on 9543.
nutrient uptake, phosphorus, nutrient availability, endomycorrhizas 9544.
stunt, methyl bromide fumigation induction, growth role endomycorrhizas 5913.
- Tagetitoxin,**
Pseudomonas syringae, structure 6726.
- Talita,**
food, role, psychrotrophic microorganisms 2909.
- Take-all,**
fungi, Triticum aestivum, soil microorganisms, amoeba, phagocytosis 4223.
Gaeumannomyces graminis, disease control, Pseudomonas seed treatments, Triticum aestivum 3158.
Gaeumannomyces graminis, disease control, use, Pseudomonas, Triticum aestivum 4090.
Gaeumannomyces graminis, effects on Triticum yield 371.
Gaeumannomyces graminis, shading, effects on Gramineae senescence 3956.
Gaeumannomyces graminis f.sp. tritici, suppression, amoeba, mycophagy, crop fields

Take-all, (continued)

5920.
Gaeumannomyces graminis var. *tritici*, agricultural practices, effects on incidence, *Triticum aestivum* 9361.
Gaeumannomyces graminis var. *tritici*, crop rotation, *Triticum aestivum* 2266.
Gaeumannomyces graminis var. *tritici*, disease control, benomyl, carbendazim, *Triticum aestivum* 507.
Gaeumannomyces graminis var. *tritici*, pathogenicity, nutrient availability, soil pH effects on, *Triticum aestivum* 3013.
Gaeumannomyces graminis var. *tritici*, soil, crops effects on survival 3954.
Gaeumannomyces graminis var. *tritici*, triadimenol seed treatments, *Triticum aestivum* 5067.
Gaeumannomyces graminis var. *tritici*, *Triticum*, association, soil water 491.
Gaeumannomyces graminis var. *tritici*, virulence, *Triticum aestivum* 2137.
Triticum aestivum, ammonium fertilizer applications effects on 1331.
- Talaromyces emersonii**,
cellulase, hydrolysis, sugar beets cellulose 9153.
cellulase, production, activity 7432.
cellulase sorption, cellulose substrates 9240.
 β -D-glucosidase, biological properties 31.
- Talaromyces flavus**,
biological control, wilt, *Verticillium dahliae*, *Solanum melongena* 1390.
soil microorganisms, Spain, check lists 3202.
- Talaromyces luteus**,
soil microorganisms, Spain, check lists 3202.
- Talaromyces wortmannii**,
soil microorganisms, Spain, check lists 3202.
- Telopenin**,
isolation, *Streptomyces mozuensis*, characterization 923.
- Tennase**,
bacteria, tannin decomposition 5600.
isolation, purification, characterization, *Penicillium chrysogenum* 7429.
- Tennic acid**,
stimulation, *Armillaria mellea*, rhizomorphs formation, role pathogenicity, trees 1455.
- Tennin**,
decomposition, tannase, bacteria 5600.
- Tanning**,
industrial wastes, digestion (anaerobic), methanogenesis 8964.
- Tannins**,
soil amendment, effects on, *Pseudomonas solanacearum*, *Penicillium*, respiration, glucose oxidation 593.
- Tanzania**,
forests, mycorrhizas symbiosis, trees, shrubs 2296.
mycoplasma-like organisms infection, *Cocos nucifera*, etiology 3972.
- Teraxacum**,
infection, lettuce mosaic virus 2177.
- Teraxacum officinale**,
disease reservoirs, tomato ringspot virus, prunus 1209.
isolates, dandelion latent virus, purification, characterization, plants infection 416.
Xiphinema americanum, transmission, tomato ringspot virus 8595.
- Tersonemus**,
vectors, blue stain, *Ceratocystis minor*, *Pinus* 3168.
- D-(-)-Tartate dehydrogenase**,
isoenzymes, *Pseudomonas*, isolation, characterization 21.
- Tartate dehydrogenase**,
+D-malate dehydrogenase (decarboxylating) bifunctional enzymes, *Rhodospseudomonas* sphaeroides, purification, characterization 7415.
- D-(-)-Tartate hydro-lyase**,
production, *Rhodospseudomonas* sphaeroides 2796.
- Teste panel evaluation**,
dairy products, spoilage, yeasts, coliforms, storage effects on 4771.
- Tetramycin A**,
Streptomyces tauricus, isolation, characterization 1678.
- Tetramycin B**,
Streptomyces tauricus, isolation, characterization 1678.
- Taxonomic significance**,
Aspergillus sojae, soy sauce fermentation 115.
fungi, low molecular weight metabolites, evolution 5461.
Rhizobium, DNA homology, phage typing, nodulation, *Galega* infection 8696.
Streptomyces antibiotic resistance markers transformation, *Acinetobacter calcoaceticus* 7905.
- Taxonomy**,
Actinoplanes awajinensis subsp. mycoplanecinus, new taxa, biosynthesis, mycoplanecins 9769.
Berberis, Mahonia, rust, *Cumminsella* 423.
Capnocytophaga, identification keys, computer programs 843.
Graphiophora phoenicis infection, *Phoenix canariensis*, ultrastructure 4008.
Lactobacillus, relationship, bacteriocins antibiotic sensitivity testing 1659.
Rhizocoria, association, antibiotic sensitivity testing 2517.
Nocardia solani, mating types, pathogenicity, plant diseases, reviews 2974.
Spiroplasma, growth inhibition test, use 2667.
Siselia bougainvilleae sp. nov., isolation, *Bougainvillea spectabilis*, host plants 1254.
Streptomyces albus subsp. *tetrafungini*, biosynthesis, tetrafungin, comparison, nystatin 9771.
Streptomyces albus, menaquinone structure, use spectroscopy 5552.
Streptomyces, chitinotrophy, biosynthesis, physicochemical properties 6190.
- Taxonomy (numerical)**,
bacteria, computer applications 9887.
microorganisms, computer programs, proteins electrophoresis 8091.
- Teat dips**,
iodine, mastitis incidence, cattle 4462.
prophylaxis, mastitis, cattle 8071.
quaternary ammonium compounds, antibacterial activity, disease control, mastitis, cattle 1728.
udder hygiene, in vitro susceptibility, *Staphylococcus aureus* 6038.
- Teats**,
contamination sources, spore-forming bacteria, milk 4812.
washing, effects on bacteria contamination, milk, cattle 5350.
- Technology**,
clinical microbiology, use, bacteria enzymes 970.
ethanol fermentation, yeasts 142.
- Teeth**,
fluoride topical application, dental caries prophylaxis, man 8996.

Teeth, (continued)

- man, bacteria contamination, dentistry instruments 2643.
topical application, fluoride treatment, dental caries prophylaxis, man 8995.
- Telcholic acid**,
Listeria monocytogenes, structure, immunology aspects 8327.
Staphylococcus aureus, antibodies detection, counter immunoelectrophoresis, immunodiagnosis, infection 3927.
Staphylococcus aureus, antibodies, detection, enzyme-linked immunosorbent assay 9939.
Staphylococcus, enzyme-linked immunosorbent assay, detection, immunoglobulin G, immunoglobulin M, immunodiagnosis infection, man 9919.
- Telcholicase**,
Bacillus subtilis, purification, characterization 7403.
purification, physicochemical properties, *Bacillus subtilis* 957.
- Telchomycin**,
antibacterial activity, comparison vancomycin 8899.
antibacterial activity, diphtheroids 7977.
antibacterial activity, gram-positive bacteria 3437.
antibacterial activity, *Streptococcus*, *Streptococcus* 8011.
antibacterial activity, treatment, septicemia, gram-positive bacteria, mice 7183.
antibiotic sensitivity testing, gram-positive bacteria 6202.
 \pm rifampicin, antibacterial activity, *Staphylococcus*, *Streptococcus* 3392.
- Telchomycin A2**,
antibacterial activity 3322.
- Telfaira occidentalis**,
disease resistance, mosaic disease 5042.
- Temocillin**,
antibacterial activity 6155.
antibacterial activity, Enterobacteriaceae 2552.
antibacterial activity, Enterobacteriaceae 5254.
antibacterial activity, Enterobacteriaceae, β -lactamase stability 2550.
antibacterial activity, *Escherichia coli* 2553.
antibacterial activity, *Haemophilus influenzae* type b 2546.
Enterobacteriaceae, *Neisseria gonorrhoeae*, *Haemophilus influenzae*, antibacterial activity 2554.
- Temperature**,
Abies concolor, effects on canker 4157.
Acer, *Verticillium dahliae* infection, effects on growth 2321.
activated sludge, effects on 7198.
adaptability, soil microorganisms, ecological evaluation 5895.
antibiotics, effects on antibacterial activity, aerobic bacteria 1603.
assays, fermentation equipment 9825.
association, anaerobic bacteria survival, swabs transport system 6334.
association, bacteria histamine biosynthesis, food poisoning 121.
association, *Candida guilliermondii* continuous culture 2725.
association, digestion (anaerobic), anaerobic bacteria, sewage treatment 5269.
association, food poisoning, *Salmonella*, *Clostridium perfringens*, *Campylobacter*, epidemiology, British Isles 3828.
association, protein composition, yeasts feeds 1087.
association, *Pseudomonas syringae* infection, *Populus trichocarpa*, symptoms 4173.
chickens carcasses, effects on food contamination, Enterobacteriaceae *Salmonella* 4786.
cold storage, effects on food, coliforms, yeasts, butter 8465.
effects on *Aeromonas salmonicida* subsp. *salmonicida*, biochemical characteristics, novobiocin drug resistance 5167.
effects on *Agrobacterium tumefaciens*, crown gall, *Helianthus annuus*, *Kalanchoe* 8574.
effects on *Alternaria alternata* growth, *Helianthus annuus* 6800.
effects on, *Alternaria solani*, infection, wound healing, *Solanum tuberosum* 4003.
effects on, antifungal activity, amphotericin B, *Sporothrix schenckii* 1569.
effects on *Bacillus thuringiensis* sterilization 4323.
effects on *Bacillus thuringiensis* subsp. *israelensis* spores viability, biological control *Aedes aegypti* 4713.
effects on, *Bacillus thuringiensis*, var. *israelensis*, pathogens, biological control, *Culex pipiens molestus* 2075.
effects on, bacteria, food contamination, beef, pork 241.
effects on, bacteria, spoilage, mince meat+soybeans proteins 228.
effects on *Botrytis cinerea* post-harvest decay, grapes 2905.
effects on, *Botrytis squamosa*, infection, *Allium cepa* 8591.
effects on, *Campylobacter coli*, *Campylobacter fetus* subsp. *jejuni*, milk, survival 189.
effects on *Campylobacter fetus* media (enrichment), isolation, poultry 8141.
effects on carbon dioxide gas production, soil, Japan 8668.
effects on, carbon dioxide, production, soil microorganisms 577.
effects on, catalase kinetics, soil 3200.
effects on, corn, *Aspergillus oryzae*, fermentation, ethanol 8395.
effects on, dieback, *Phytophthora parasitica*, overwintering, *Rhododendron* 9389.
effects on disc-diffusion test antibiotic sensitivity testing 7976.
effects on, *Drechslera graminea*, disease spread, leaf stripe, *Hordeum vulgare* 1425.
effects on, elimination, tobacco mosaic virus, cowpea chlorotic mottle virus, *Acacia laburnum*, *Vigna unguiculata* 457.
effects on extracellular protein biosynthesis, *Streptococcus equisimilis* 8214.
effects on, foot-and-mouth disease virus strains, growth 2469.
effects on fungi decomposition, wood, *Fagus sylvatica* 9530.
effects on, growth, *Monosporascus utipoides*, infection, *Cucumis melo* 5758.
effects on infectivity, *Puccinia recondita* f. sp. *tritici*, leaf rust, *Triticum aestivum* 3932.
effects on iron oxidation, bacteria, rivers contamination, mines waste water 5134.
effects on, lactic-acid bacteria, ripening, cheese 8460.
effects on, lipolysis, activity, *Thamnidium elegans*, *Mucor mucedo*, *Chaetostylum fresenii* 5512.
effects on *Lycopodium obscurum* post-harvest decay, *Erwinia carotovora* subsp. *carotovora* 1330.
effects on, methanogenic bacteria, methanogenesis 8715.
effects on, microbial pollution, bacteria, rivers 6264.
effects on, occurrence, ochratoxin A, *Aspergillus ochraceus*, *Penicillium viridicatum* 7624.
effects on, pathogenesis, brown spot, *Septoria glaucina*, *Glycine* max 2105.
effects on, pathogenesis, *Phytophthora parasitica* var. *nicotianae*, black shank, *Nicotiana tabacum* 3050.
effects on, *Phytophthora megasperma* f. sp. *glycinea*, pathogenicity, *Glycine* max, *Medicago sativa*, *Cicer arietinum* 336.
effects on, powdery mildew, *Begonia* 401.
effects on *Rhizobium*, growth rate, competition, nodulation, *Vigna unguiculata*

Temperature, (continued)

9588.
effects on, *Salmonella typhimurium*, *Escherichia coli*, growth, animal wastes, pigs 3954
effects on, soil microorganisms respiration 3206
effects on *Solanum phureja* disease resistance, *Pseudomonas solanacearum* infection 434.
effects on, *Staphylococcus aureus*, β -lactam antibiotics, antibiotic resistance 3282
effects on *Streptomyces rimosus* oxytetracycline biosynthesis 2564.
effects on, survival, *Campylobacter fetus* subsp. jejuni, *Campylobacter fetus* subsp. intestinalis, skim-milk, beef 217.
effects on, *Venturia inaequalis* infection, apples 437.
effects on, virulence, *Culex pipiens*, *Anopheles stephensi*, *Metarrhizium anisopliae*, candida, virility 7478.
effects on wine fermentation 7531.
eggs, effects on food contamination, bacteria 4844.
ethylene oxide sterilization, effects on indicator species, *Bacillus subtilis* subsp. niger 4322.
fermentation, *Theobroma cacao*, methodology, effects on 3842.
incubation, effects on endotoxins biosynthesis, *Yersinia enterocolitica* 2950.
incubation, effects on, microorganisms inactivation, food spoilage rates 2926.
kinetics, soil properties, mineralization, nitrification, soil microorganisms 8667.
low, scanning electron microscopy, soil microorganisms 578.
Malus domestica buds, powdery mildew, effects on survival 1211.
Fusarium pathogen, *pathogen*, *Fusarium oxysporum* f.sp. phase, effects on 7653.
relationship, *Diploicia pinea* infection, *Pinus radiata* seedlings 7786.
relationship, N,N-dimethyldecanamine antibacterial activity 5175.
relationship, wastewater treatment 5330.
role, disease resistance, *Melampsora medusae* leaf rust, *Populus deltoides*, *Populus euramericana* 6911.
role, proteinase biosynthesis suppression, *Bacillus megaterium* 7425.
role, *Rhizobium* viability association storage 7242.
roots, Glycine max, effects on symbiosis, *Rhizobium japonicum* 6940.
salt marshes soil, effects on denitrification 2367.
scab, *Malus*, effects on pathogenesis 2149.
sludges digestion (anaerobic), effects on 7199.
sludges digestion (anaerobic), kinetics, effects on 7200.
soil, denitrification, nitrous oxide measuring techniques 612.
soil microorganisms, nitrate reduction, effects on 7839.
soils (loam), effects on survival, mycorrhizas 1481.
Staphylococcus aureus cell culture, relationship media (selective) 2661.
starter cultures, lactic acid bacteria, buttermilk production 4802.
storage conditions, effects on opening, proteolytic enzymes, organoleptic evaluation, Cheddar cheese 9271.
storage conditions, fishery products, effects on, *Pseudomonas*, *Moraxella*, *Lactobacillus* 8498.
susceptibility, rot, *Erwinia carotovora* subsp. *carotovora*, *Solanum tuberosum* 3062.
toxicity, factors affecting, *Bacillus thuringiensis*, *Culex quinquefasciatus*, *Aedes aegypti*, *Anopheles albimanus*, *Anopheles quadrimaculatus* 8380.
Venturia inaequalis, effects on fruit bodies development 1224.
Vibrio ecological distribution, coastal waters 6259.
Zymomonas mobilis cell culture, factors affecting 9056.
- Temperature jump studies,**
use, microwave oven, bacteria gene amplification 9892.
- Temperature tolerance,**
Melampsora medusae isolates, *Populus deltoides* infection 2206.
- Temperature-sensitive mutant,**
cell division, *Escherichia coli*, penicillins effects on inorganic pyrophosphatase levels 8000.
- Tephrosia purpurea,**
extracts, antifungal activity 1570.
- Teratogenicity testing,**
Chaetomium cellulolyticum, single-cell protein, laboratory animals, chickens, sheep 9118.
single-cell protein, Basidiomycetes, animal models 9113.
- Terblum,**
ions, interaction, inorganic pyrophosphatase binding sites, *Saccharomyces cerevisiae* 4687.
- Terminators,**
fusion, *Escherichia coli* lacZ gene, rifampicin effects on, gene expression 1626.
- 5'-Terminus,**
RNA, plant viruses, hybridization analysis methodology 9867.
- Termitaria,**
mounds, soil microorganisms community composition 5906.
- Tetraploids,**
abundant, scleroel, conversion, bacteria 6616.
Botrytis cinerea conversion, musts 5566.
Paraherquonin, *Penicillium paraherquelii*, isolation, structure 8376.
- Terrestrial ecosystems,**
forests, nitrogen cycle, association nitrification 513.
nitrogen cycle, factors affecting, conferences 908.
- Territrem,**
isolation, separation, methodology, *Aspergillus terreus* 286.
- Territrem A,**
isolation, separation, methodology, *Aspergillus terreus* 286.
- Territrem B,**
isolation, separation, methodology, *Aspergillus terreus* 286.
- Tertiary butylhydroquinone,**
effects on *Aspergillus*, growth, aflatoxins biosynthesis 5646.
- $\Delta 6$ -Testosterone,**
photoaffinity labelling, $\Delta 5$ -3-ketosteroid isomerase, *Pseudomonas testosteronei* 5489.
- Testosterone-binding protein,**
purification, characterization, cell membranes, *Pseudomonas testosteronei* 6394.
- Tetanus,**
toxins, antibodies, blood donors, screening, latex agglutination 3621.
- Tetrachaelum elegans,**
biodegradation, *Populus tremuloides*, leaf litter 8045.
- 4,5,6,7-Tetrachlorophthalide,**
blast, *Oryza sativa*, effects on *Pycularia oryzae* pathogenesis 5827.
- Tetracledium marshallianum,**
biodegradation, *Populus tremuloides*, leaf litter 8045.
- Tetracycline,**
antibacterial activity, diptheroids 7977.

Tetracycline, (continued)

- antibacterial activity, *Haemophilus influenzae*, *Streptococcus pneumoniae* 7985.
antibacterial activity, *Neisseria gonorrhoeae* 4334.
antibacterial activity, pharmacokinetics, side effects 5172.
antibacterial activity, *Rickettsia* 1640.
antibacterial activity, *Staphylococcus*, clinical isolates 8804.
antibiotic resistance development, bacteria 6020.
antibiotic resistance, *Propionibacterium*, clinical isolates, acne 8736.
antibiotic resistance, *Pseudomonas aeruginosa* 7023.
antibiotic resistance, R factors, *Rhizobium japonicum* 7875.
antibiotic resistance, R factors, *Shigella* 7044.
antibiotic resistance, *Salmonella* isolates, Netherlands, incidence 5161.
antibiotic resistance, *Staphylococcus aureus* L form, cell fusion, recombinants 3286.
antibiotic resistance, transfer, *Clostridium difficile* 6011.
antibiotic sensitivity testing, antibiotic resistance, *Haemophilus influenzae*, *Haemophilus parainfluenzae* 7873.
antibiotic sensitivity testing, *Clostridium perfringens* 4336.
antibiotic sensitivity testing, *Neisseria gonorrhoeae* 5240.
antibiotic sensitivity testing, *Staphylococcus* clinical isolates 9734.
antibiotic synergism, penicillin, rifampicin, *Rickettsia prowazekii*, *Rickettsia sibirica*, chick embryos 7969.
bacteria urinary tract isolates, antibiotic sensitivity testing, antibiotic resistance 4287.
Bacteroides fragilis antibiotic sensitivity testing 7130.
biosynthesis parameters, fermentation equipment, *Streptomyces* 8871.
comparison, minocycline, transport, relationship, susceptibility, *Escherichia coli* 1635.
comparison, thiacycline, antibacterial activity 1637.
detection, milk, blood 4393.
effects on, *Bordetella pertussis* ultrastructure 1599.
Escherichia coli excretion, role susceptibility antibacterial activity 9767.
 γ -ethionium, antibacterial activity, bacteria 1558.
Neisseria gonorrhoeae antibiotic sensitivity testing 3382.
resistance, association, cadmium sensitivity, *Escherichia coli* plasmids 1536.
resistance, enhancement mechanisms, genetic analysis, *Escherichia coli* 7894.
resistance, *Escherichia coli*, clinical isolates, British Isles 1540.
resistance, *Escherichia coli*, clinical isolates, British Isles 1540.
rosaramycin, erythromycin, spectinomycin, antibiotic sensitivity testing comparison 6092.
Salmonella clinical isolates, antibiotic sensitivity testing 6112.
sensitivity, pathogens 7077.
Streptomyces aureofaciens, biosynthesis, fermenters aeration 8870.
susceptibility, *Escherichia coli*, statistical analysis methodology 1795.
treatment, mycoplasma-like organisms proliferation disease, *Malus* 3023.
Yersinia pestis antibiotic sensitivity testing 6110.
- Tetracyclines,**
antibacterial activity comparison 6182.
antibiotic sensitivity testing, *Propionibacterium acnes*, clinical isolates 3381.
physicochemical properties 2565.
resistance, *Escherichia coli* 1545.
treatment, Mycoplasma infection, plants 5840.
- Tetrafungin,**
biosynthesis, *Streptomyces albulus* subsp. *tetrafungini*, taxonomy, comparison nystatin 9771.
Streptomyces albulus, biosynthesis, characterization 9769.
- 4'-O-Tetrahydro-pyranyladiamycin,**
nucleobases, high-performance liquid chromatography 9203.
- 5,6,7,8-Tetrahydro-4-quinolone,**
synthesis, biocides 5224.
- Tetrahydrocerulenin,**
Cephalosporium caerulens, use affinity labelling, fatty-acid synthetase 8883.
- Tetrahydrofolate dehydrogenase,**
genes, trimethoprim, drug resistance, *Escherichia coli*, *Klebsiella pneumoniae* 1522.
interaction methotrexate analogs, fluorescence, *Lactobacillus casei* 2801.
NADP⁺, thioNADP⁺ binding, nuclear Overhauser effect, *Lactobacillus casei* 2785.
- 1,2,3,4-Tetrahydronaphthalene,**
biodegradation, *Pseudomonas stutzeri* 8718.
- Tetrahymena pyriformis,**
predator-prey interactions, *Escherichia coli*, attachment, continuous culture 2673.
- Tetramethyl pyrazine,**
biosynthesis, *Bacillus cereus* 1983.
- Tetramycin,**
+ethionium, antibacterial activity, *Pseudomonas aeruginosa*, clinical isolates 2523.
- Tetraploidy,**
characterization, *Saccharomyces cerevisiae*, relationship breweries, breweries, relationship, *Saccharomyces cerevisiae*, tetraploidy characterization 2863.
- Tetraselmis,**
+Hydrodictyon reticulatum, mixed culture, environmental conditions effects on fermentation 2858.
- Tetrazolium,**
reduction, use, antibiotic sensitivity testing, *Streptococcus*, methodology 9975.
- Tetrazolium salts,**
use, measuring techniques, *Saccharomyces uvarum* respiration 9068.
- Tetrocarcin,**
Micromonospora chalcone, biosynthesis, carbon-14 incorporation 8905.
Micromonospora chalcone biosynthesis, structure, antibacterial activity, gram-positive bacteria 1671.
- Tetrocarcin A,**
antibacterial activity, *Bacillus subtilis* 7178.
biosynthesis, *Micromonospora chalcone* 2572.
- Tetronic acids,**
Penicillium multicolor, sodium acetate incorporation, oxygen distribution 7287.
Penicillium multicolor, sodium acetate incorporation, oxygen distribution 7287.
- Texazone,**
Actinomycetes biosynthesis, structure 8337.
- Textile industry,**
municipal effluents, wastewater treatment, bibliographies 1696.
- Thailand,**
fungus bean yellow mosaic virus *Bemisia tabaci* disease transmission, host range, purification characterization 6813.
Neisseria gonorrhoeae, antibiotic sensitivity testing 7078.

- Thailand, (continued)**
 Ustilago coicis smut incidence, Coix lachryma-jobi 5770.
- Thalassia testudinum**,
 leaves, fungal flora, sterilization methodology 3623.
- Thamnostylum**,
 new records, India, soil microorganisms 7794.
- Thanatephorus**,
 isolation, use, media (culture)+valdamicin 2709.
- Thanatephorus cucumeris**,
 virulence, root rot, crown rot, Beta vulgaris 5008.
 web blight, Phascolus vulgaris, epidemiology, Costa Rica 9325.
- Thannidium elegans**,
 lipolysis, proteolytic enzymes, activity, temperature, effects on 5512.
- Thielephora terrestris**,
 ectomycorrhizas, effects on Pinus taeda, land reclamation, mines 2305.
 mycorrhizas, Pinus patula, India 2303.
 mycorrhizas, Pinus taeda, soil amendment, land reclamation, mines, revegetation 2302.
 phosphorus nutrient sources, mycorrhizas, seedlings 3441.
- Thiemeia villosa**,
 susceptibility, downy mildew, Peronosclerospora sorghi 5700.
- Theobroma cacao**,
 beans, fermentation, thermophilic fungi post-harvest decay 8601.
 cacao swollen shoot virus, detection, enzyme-linked immunosorbent assay 7221.
 cacao swollen shoot virus infection, pathogenesis 3026.
 Crinipellis perniciosa witches' broom, histopathology 398.
 dieback, Oncobasidium theobromae, China, People's Rep. 7679.
 fermentation, methodology, effects on, temperature, acidity, food quality 3842.
 Phytophthora black pod, etiology 396.
 Phytophthora infection, population structure 4977.
 plantations, nitrogen cycle 3222.
 plantations, nitrogen cycle, nutrient sources 3219.
 seedlings, pathogenicity, Phytophthora 3966.
- Theobroma cacao**,
 Phytophthora palmivora canker, metalaxyl treatment, disease control 1417.
- Therioaphis trifolii maculata**,
 biological control, pathogens, Zoophthora radicans 1033.
- Thermal injury**,
 Kluyveromyces fragilis, ethanol, effects on 8394.
 Salmonella typhimurium, recovery, media (enrichment), media (selective) 3574.
 Staphylococcus aureus, recovery, meat products, preservatives effects on 264.
- Thermal stability**,
 aflatoxin M1, milk 8505.
 proteinase activity, Thermactinomyces vulgaris 2761.
 Pseudomonas fluorescens, proteinase, extracellular enzymes 4663.
 Staphylococcus aureus, nuclease, role viability, food processing 266.
- Thermine**,
 role, 1,3-diaminopropane incorporation, Clostridium thermohydrosulfuricum
 polyamines biosynthesis 9205.
- Thermitease**,
 characterization, thermactinomyces vulgaris 4683.
 Thermactinomyces vulgaris, active sites, sulfhydryl groups, chemical
 modification 3685.
- Thermotactinomyces vulgaris**,
 α -amylase, activity 1939.
 α -amylase, purification, characterization 1919.
 asparaginase isolation, characterization 9181.
 fermentation, proteinase, growth, characterization 3701.
 proteinase activity, autolysis, thermal stability 2761.
 serine proteinase, active sites, structure-activity relationships 3665.
 spore germination methodology, association carbon dioxide 5384.
 thermitase active sites, sulfhydryl groups, chemical modification 3685.
 thermitase characterization 4683.
- Thermotoccus aurantiacus**,
 cellulase production 1851.
 post-harvest decay, Theobroma cacao beans fermentation 8601.
 post-harvest decay, tobacco leaves, association storage 8599.
- Thermodesulfobacterium commune**,
 sulphite reductase, purification, characterization 3664.
- Thermomonospora**,
 lactose solutions, growth inhibition, heat sterilization 2907.
- Thermomonospora curvata**,
 mutants, cellulase biosynthesis 974.
- Thermomonospora curvata**,
 cellulase production, cyclic AMP levels, catabolite repression 9179.
- Thermophilic microorganisms**,
 digestion (aerobic), waste treatment, sewage sludge 8939.
- Thermophilic bacteria**,
 actinomycetes, sewage sludge composts, distribution 5312.
 adenosinetriphosphatase, hydrodynamics, fluorometry 1879.
 biomass, digestion (aerobic), sewage sludge 8931.
 cellulase, purification, characterization 5505.
 digestion (aerobic), sewage sludge 4431.
 methane production, isolation, growth, morphology 2386.
 polysaccharides biosynthesis, carbohydrate composition 6573.
 sewage sludge, digestion (anaerobic), heavy metals toxicity 8063.
 starter cultures, fermentation, acidic curd cheese 8459.
- Thermophilic fungi**,
 Aspergillus fumigatus, cellulolytic enzymes 8261.
 biodegradation, Canarium schweinfurthii, bark 550.
 colonization, straw, Triticum, Vicia faba, composting 3780.
 isolation, environmental surveys 3190.
 lignocellulose biodegradation 6641.
 post-harvest decay, Theobroma cacao beans fermentation 8601.
 post-harvest decay, tobacco leaves, association storage 8599.
 soil, surveys, Syria 7818.
- Thermophilic microorganisms**,
 α -amylase biosynthesis, fungi, bacteria, yeasts 1913.
 composting, sewage sludge 6253.
 dehydrogenase activity, soil moisture, soil characteristics, plant communities,
 deserts 9559.
 hydrogen bacteria, 2-methylthio-1,4-naphthoquinone structure 6619.
- Thermoplasma**,
 protein biosynthesis, biochemical characteristics 9123.
- Thermoplasma acidophilum**,
 ferredoxin, purification, characterization 922.
- Thermopolyspora faeni**,
 farmer's lung, immunoprecipitation, diagnosis, man 4486.
- Thermus**,
 factors affecting, growth, reactors, methodology 1794.
- Thermus aquaticus**,
 citrate synthase, succinyl-CoA synthetase (GDP-forming), isolation,
 characterization 5497.
 continuous culture, growth, media (culture) 2691.
 NADH dehydrogenase, purification, characterization 4618.
 proteinase biosynthesis 6514.
- Thermus caldophilus**,
 extracellular proteinase, purification, characterization 6478.
- Thermus ruber**,
 DNA polymerase, purification, characterization 6471.
- Thermus thermophilus**,
 elongation factor G, crystallization 4574.
 elongation factor G, purification, characterization 1829.
 endodeoxyribonuclease Th1111, purification, characterization 1885.
 glyceraldehyde-phosphate dehydrogenase, purification, characterization 4640.
 immobilized enzymes, malate dehydrogenase 50.
 polymers, structure, characterization 8194.
- Thiabendazole**,
 antifungal activity, oranges green mold, comparison, sodium orthophenylphenate,
 CGA-64251 1319.
 antifungal activity, tolerance, Trichoderma viride 3154.
 disease control, Rhizoctonia solani, stem canker, black scurf, Solanum tuberosum
 5055.
 resistance, Penicillium italicum, blue mold, oranges 6009.
 specificity, cell cycle, Schizosaccharomyces pombe 690.
- Thiacycline**,
 antibacterial activity, comparison, tetracycline, doxycycline, minocycline 1637.
 2H-1,3,5-Thiadiazine-2,4(3H)-dione,
 derivatives, synthesis, antimicrobial activity, bacteria, fungi 1585.
 1,3,4-Thiadiazolo [3,2-a]-s-triazine-5(6H, 7H)-thiones,
 synthesis, antifungal activity 4307.
- Thiamin**,
 effects on citric acid production, Aspergillus niger 5468.
 production, immobilized cells, Propionibacterium 4725.
- Thiamin pyridinylase**,
 purification, characterization, Bacillus thiaminolyticus 8257.
- Thiamphenicol**,
 analogs, synthesis, antibacterial activity 2439.
 antibacterial activity, bacteria, clinical isolates 9669.
 antibacterial activity, Haemophilus influenzae, Neisseria gonorrhoeae, Salmonella
 typhi, Salmonella paratyphi 756.
 antibacterial activity, Neisseria gonorrhoeae 4334.
 antibacterial activity, Streptococcus pneumoniae 7154.
- Thiastetracycline**,
 antibacterial activity comparison, tetracyclines 6182.
- Thiazolidine-4-carboxylic acid**,
 incorporation, Claviceps purpurea, ergosine biosynthesis 1032.
- Thiazolidinone**,
 +sulfanilamide, synthesis, antibacterial activity 4294.
- Thickness**,
 factors affecting, activated sludge 5304.
- Thielavia terricola**,
 thielavin, prostaglandin synthase, inhibitors structure 7490.
- Thielavia**,
 Thielavia terricola, prostaglandin synthase inhibitors, structure 7490.
- Thielaviopsis basicola**,
 black pod, disease resistance, plant breeding, Arachis hypogaea 9465.
 black root, histology, Ilex crenata 4994.
 chlamydospores, germination, nutrient availability, fungistasis, soil 9572.
 infection role, Fraxylus invasion inhibition, Pisum sativum 9333.
- Thielaviopsis paradoxa**,
 post rot, Citrus media, factors affecting enzymes 5738.
- Thienamycin**,
 biosynthesis, Streptomyces cattleya, factors affecting 6184.
 Campylobacter fetus subsp. jejuni drug sensitivity testing 4292.
 derivatives, antibacterial activity 3442.
 media (isolation), Pseudomonas maltophilia, feces 9066.
 production, Streptomyces cattleya, balance studies 7997.
- Thimerosal**,
 preservatives, nose sprays, Pseudomonas cepacia survival 7118.
- Thin-layer chromatography**,
 bioassays, B-D-glucosidase, activity, use, Penicillium expansum 7270.
 carboxenone 9712.
 mycotoxins, use, chromatographic acid 6697.
 penicillins separation techniques 2549.
- Thinning**,
 forests, effects on fruit bodies production, Basidiomycetes 6907.
- Thiobacillus**,
 amine dehydrogenase, purification, physicochemical properties, substrate
 specificity, subunit structure 64.
 antibacterial activity, detergents 7914.
 enumeration, concrete walls corrosion, sewers, Germany, Fed. Rep. 7537.
 identification, isolation, drinking water 9818.
- Thiobacillus denitrificans**,
 denitrification, kinetics, wastewater treatment 6243.
 nitrate reduction, entrapment, agarose 874.
- Thiobacillus ferrooxidans**,
 adsorption, coal 8712.
 cell culture contamination, acidophilic bacteria, heterotrophic bacteria,
 elimination methodology 9978.
 pyrite oxidation, solubilization, iron valency 8709.
 uranium solubilization 7854.
- Thiobacillus thioparasus**,
 biodegradation, O,O-dimethyl phosphorodithioate, pesticides (organophosphorus)
 derivatives 3787.
 sulfur conversion, soil, continuous culture 7793.
- Thiobenzylpyrimidine**,
 antibacterial activity, structure-activity relationships 6036.
- Thioctic acid**,
 man, mushroom poisoning treatment 5612.

- 4-Thiocyanatopyrazoles**,
antifungal activity, phytopathogenic fungi 6875.
- Thiocyanic acid**,
+ hydrogen peroxide, preservation fermented milk products, spoilage, psychrotrophic bacteria 6685.
- 2-(Thiocyanomethyl) benzothiazole**,
disease control, stain, wood, Pinus 5882.
- Thioesterase**,
rats mammary gland, interaction fatty-acid synthetase, yeasts 8279.
- Thioesterase I**,
purification, characterization, Mycobacterium smegmatis 8220.
- 6-Thioquinane**,
effects on DNA incorporation, vaccinia virus 9691.
- ThioNADP**
binding tetrahydrofolate dehydrogenase, nuclear Overhauser effect, Lactobacillus casei 2785.
- Thionelin**,
copper complex, Saccharomyces cerevisiae, reconstitution laccase, Rhizus vernicifer 6497.
- Thiopedia rosea**,
foculation, lagoons, sewage effluents, anaerobic conditions 8064.
- Thiopeptin**,
Streptomyces tateyamensis, structure 8914.
Streptomyces tateyamensis, structure 8915.
- Thiophanate**,
antifungal activity, Ceratocystis fimbriata f.sp. platani 694.
- Thiophanate methyl**,
antifungal activity, tolerance, Trichoderma viride 3154.
effects on Conidiobolus obscurus resting spores spore germination 7762.
effects on fungi spore germination 7765.
treatment, pythium infection, Gramineae 4114.
- Thiophene**,
derivatives, antimicrobial activity 9704.
- Thiophene-2-carboxylate**,
metabolism, phototrophic bacteria 152.
- Thiophosphamide**,
cytotoxicity, Escherichia coli morphology 2444.
- Thioredoxin**,
folding, conformation, C.D., Escherichia coli 5463.
- Thiosemicarbazide**,
salts, antibacterial activity 7923.
- Thiosemicarbazones**,
antiviral activity 7058.
antiviral agents, antifungal agents, synthesis 7114.
- Thiostrepton**,
streptomyces, structure, N.M.R. 8913.
structure 8915.
- Thiosulfate**,
oxidation, enzymes isolation, marine environment, Pseudomonas 7404.
- Thiosulfate sulphurtransferase**,
biodegradation, chlondazon, bacteria 156.
- Thiosulphate cyanide sulphurtransferase**,
sand, activity, correlation, vegetation, British Isles 6955.
- Thiosulphate sulphurtransferase**,
activity, soil microorganisms, humus, forest floor 7777.
- Thiotromycin**,
Streptomyces, taxonomy, biosynthesis, physicochemical properties 6190.
- 2-Thiouracil**,
effects on, tobacco mosaic virus, RNA biosynthesis, protein biosynthesis 5220.
injection, disease control, apple mosaic virus, Malus pumila 9500.
- Thiouraea**,
derivatives, antiviral activity, potato virus X, Nicotiana tabacum 8641.
- Thiuram**,
effects on Macrophomina phaseolina spore germination 7760.
seed treatments effects on Glycine max 5844.
- Threonine**,
biosynthesis, Serratia marcescens 4580.
effects on valine sensitivity, Escherichia coli, association, nutrient status 3304.
production, Brevibacterium lactofermentum, Escherichia coli, whey 3655.
- Threonine aldolase**,
activity, Lactobacillus, effects on milk flavor 7587.
- Threonine dehydratase**,
Proteus morgani, biosynthesis, purification, characterization 1900.
- Thrua**,
Phytophthora cinnamomi experimental infection, disease resistance 472.
- Thyramphenicol**,
antibiotic sensitivity testing, Clostridium perfringens 4336.
- Thylakoids**,
reaction centers, cytochrome c2, purification, Rhodospseudomonas viridis 6392.
- Thymine**,
analogs, antiviral activity, herpes simplex virus 1, herpes simplex virus 2 5214.
herpes simplex virus infected fibroblasts, effects on
9-(2-hydroxyethoxymethyl)guanine antiviral activity 7942.
- Thymidine kinase**,
activity, herpes simplex virus infected cells, 9-(2-hydroxyethoxymethyl)guanine
antiviral activity 3363.
activity, herpes simplex virus typing methodology, association drug sensitivity
testing 1741.
DNA polymerase, mutation, 9-(2-hydroxyethoxymethyl)guanine drug resistance,
herpes simplex virus 7874.
herpes simplex virus 1 infected cells, 5-bromovinyl-2'-deoxyuridine antiviral
activity association 9685.
levels, herpesvirus plaques, autoradiography 9838.
- Thymidine phosphorylase**,
activity, Escherichia coli, immobilized cells 3694.
- Thymidylate synthase**,
association RNA, Streptococcus faecium 4598.
N.M.R., Lactobacillus casei 2759.
tumors, inhibition, Saccharopolyspora hirsuta vanoxonin 7449.
- Thymine**,
biodegradation, soil 5890.
- Thyronectria**,
infection, trees, wind barriers, distribution 4175.
- Thyronectria austro-americana**,
canker, Gleotia trianthos, pathogenesis 1460.
- Thysanophora**,
decomposition, leaf litter, Abies alba 2301.
- Thysanophora penicillioideis**,
Lanx defoliation, association Adelges grazing 540.
- Tiamulin**,
treatment white leaf disease, Cynodon dactylon 510.
- Ticarcillin**,
antibacterial activity, diphtheroids 7977.
antibacterial activity, Pseudomonas 744.
antibacterial activity, Pseudomonas aeruginosa 6128.
antibiotic sensitivity testing, gram-negative bacilli 8001.
+ cefuroxime, antibacterial activity, Pseudomonas aeruginosa, Serratia marcescens
6093.
clavulanic acid, antibiotic synergism, antibacterial activity 6147.
comparison Haemophilus influenzae, temocillin antibacterial activity 6155.
effects on Pseudomonas aeruginosa morphology 9752.
+ tobramycin, calcium, magnesium, zinc, effects on, antibacterial activity,
Pseudomonas aeruginosa 754.
- Tick-borne encephalitis**,
Ixodidae, diagnosis, indirect hemagglutination 3518.
- Tick-borne encephalitis virus**,
tick-borne encephalitis, Ixodidae, diagnosis, indirect hemagglutination 3518.
- Tilla cordata**,
Cenococcium geophilum symbiosis, morphology 4207.
Cenococcium geophilum symbiosis, relationship, drought 4206.
sap, interference biological control, bacteria, insecta 2831.
- Tilla europaea**,
7-hydroxycalamene detection, response, association, Ganoderma applanatum
infection 6844.
- Tillage**,
crop production (no-tillage), association, soil nitrate reduction, USA, Maryland,
USA, West Virginia 5950.
effects on Glycine max, nodulation, nitrogen fixation, seeds yield 5130.
effects on, soil properties, microorganisms, biomass, carbon, nitrogen,
mineralization 2359.
vertical distribution, Cochliobolus sativus, soil, Triticum aestivum 9358.
Zea mays, disease control, brown spot, Physoderma maydis 7736.
- Tilletia caries**,
bunt, Triticum aestivum 1196.
- Tilletia controversa**,
bunt, disease control, fungicides seed treatments, Triticum aestivum 4110.
bunt, spores contamination, grain, Triticum aestivum 1329.
bunt, Triticum aestivum 1196.
bunt, Triticum aestivum, disease control, fungicides foliar applications 4111.
- Tilletia foetida**,
bunt, Triticum aestivum 1196.
- Time**,
effects on Bacillus thuringiensis sterilization 4323.
effects on Campylobacter fetus subsp. jejuni media (enrichment), isolation,
treatability 8141.
inoculation, potato leaf roll virus, effects on, pathogenesis, Solanum tuberosum
3084.
stability, levorin, association, storage 1654.
- Tin**,
uptake, Streptococcus mutans, stannous fluoride effects on 8771.
- Tindazole**,
antibacterial activity, anaerobic bacteria 3312.
Campylobacter fetus subsp. jejuni drug sensitivity testing 4292.
effects on, Bacteroides, growth 6100.
- Toxaprofen**,
antifungal activity, mitochondria, respiration uncouplers, Trichophyton
mentagrophytes, Trichophyton rubrum 8786.
- Tissue culture**,
adamantane, derivatives, antiviral activity, influenza A virus 7949.
Mycoplasma hyarum, detection, methodology 2690.
Nicotiana tabacum, digitonin effects on virulence, mycoplasma-like organisms
2175.
Saccharum officinarum, sugarcane mosaic virus survival 1154.
lar stomatitis virus infection, interferon levels, enzyme immunoassay 1749.
Vitis vinifera, growth, Plasmopara viticola, downy mildew 1289.
- Tissues**,
color, calcium chloride preservatives, association, viruses infection, plants
2093.
damage, beef, mutton, bacteria contamination, beef, mutton 181.
Dermacentor marginatus, fixation, disinfection, tularemia, diagnosis 1774.
fluorescence, diagnosis, coccidioidomycosis, candidiasis, Aspergillus,
histoplasmosis 4525.
fungi detection, use, self fluorescence 8158.
Legionella pneumophila staining 5377.
Nicotiana benthamiana, ultrastructure, transmission, cassava latent virus mosaic
disease, Manihot esculenta 1315.
Nicotiana tabacum, tobacco necrosis virus infection, peroxidase, laccase,
ribonuclease, induction 318.
Phaseolus vulgaris, Pseudomonas syringae infection, syringacin W-1 biosynthesis,
activity 2114.
plant diseases, disease spread, mathematical models 1117.
Vicia faba, plant viruses hybridization analysis methodology 9865.
- Triticum aestivae**,
sour cherry necrotic ring spot virus infection 2144.
- Titration**,
anthracynic antibiotics preparation methodology 6231.
use, coliforms isolation methodology, soil 8144.
- Tobacco**,
contamination, fungi, bacteria 438.
leaves, post-harvest decay, thermophilic fungi, association storage 8599.
- Tobacco etch virus**,
infection, Nicotiana tabacum disease resistance, screening 1382.
- Tobacco mosaic virus**,
antimicrobial activity, 3-methylfurfurylidene-2-thioxo-4-thiazolidones 7960.
antiviral activity, nucleotides, biosynthesis simulation, antiviral agents,
α-interferon, Nicotiana glauca, Nicotiana tabacum 7746.
antiviral activity, Phytolacca americana glycoproteins 2491.
baculoviral, antiviral activity, effects on infectivity 1386.
coat protein, association, disease resistance, Nicotiana tabacum, role, N⁺ gene

Tobacco mosaic virus, (continued)

6848.
disease control, fungicides, seed treatments, *Crotalaria juncea* 1436.
disease resistance, callus deposition, role boron, *Nicotiana tabacum*, *Phaseolus vulgaris* 1377.
disease resistance, *Capsicum annuum* 3109.
disease resistance, hypersensitive response, *Nicotiana tabacum* 3110.
disease resistance, inheritance, plant breeding, *Nicotiana tabacum* 3115.
disease resistance, proteins, *Phaseolus vulgaris* 6608.
disease resistance, role peroxidase, *Nicotiana tabacum* 2162.
disease resistance stimulation, models, *Nicotiana tabacum* 8617.
elimination, temperature effects on, *Nicotiana tabacum* 457.
host range, Gesneriaceae 9421.
host range, plants, association defoliation 4024.
host-pathogen interactions 2094.
host-pathogen interactions, disease resistance, *Nicotiana tabacum* 2170.
hypersensitive response, U.V. radiation effects on, *Phaseolus vulgaris* 3111.
hypersensitive response, disease resistance, *Nicotiana tabacum* 1374.
hypersensitive response, lignin biosynthesis, *Nicotiana tabacum* 4080.
hypersensitive response, phospholipids, fatty acid composition, *Nicotiana tabacum* 7741.
hypersensitive response, proteins, *Nicotiana tabacum* 3081.
infected protoplasts, identification, autoradiography 8094.
infection, actinomycin D antiviral activity, *Phaseolus vulgaris* 6888.
infection, *Capsicum* disease resistance 1335.
infection, economic importance, yield, relationship, disease resistance, *Nicotiana tabacum* 9395.
infection, energetics, heat balance, leaves, *Nicotiana tabacum* 1288.
infection, gemplasm, seeds, embryos, *Lycopersicon esculentum* 2184.
infection, *Gomphrena globosa*, leaves hypersensitive response 2156.
infection, *Lycopersicon esculentum*, association, fruits ripening defects, disease resistance 4094.
infection, *Lycopersicon esculentum*, Jordan 6793.
infection, *Lycopersicon esculentum*, relationship, electrophoresis, acids solubility proteins 2983.
infection, *Nicotiana glutinosa*, antiviral agents induction 5818.
infection, *Nicotiana tabacum* leaves protoplasts 3041.
infection, *Nicotiana tabacum* leaves, ultrastructure localization 4033.
infection, *Nicotiana tabacum*, *Phaseolus vulgaris*, antiviral activity, EDTA treatment 511.
infection, *Nicotiana tabacum*, protoplasts, actinomycin D, effects on 7701.
infection, *Solanum melongena*, magnesium effects on susceptibility 3033.
infection, yeasts extracts inhibition, *Nicotiana glutinosa*, *Nicotiana glauca* 6887.
infection, yield, *Lycopersicon esculentum* 2167.
infection, 2,4-dioxynitrohydro-1,3,5-triazine+guanine antiviral activity, *Nicotiana tabacum* 6886.
infection, effects on, *Nicotiana tabacum*, yield, USA, North Carolina 9396.
inoculation, polyonions, polycations effects on, *Nicotiana tabacum* 989.
multiplication inhibition, poly(2-methyl-5-vinylpyridine N-oxide) role, *Nicotiana aegyptium* protoplasts 8582.
multiplication, inhibition ribonuclease leaves, plants 2095.
Nicotiana tabacum hypersensitive response, 2-chloroethylphosphonic acid, salicylic acid, effects on 4095.
Nicotiana tabacum, infected, methodology, isolation, double-stranded RNA 3897.
Nicotiana tabacum, protoplasts, secretions, inhibition, replication 3114.
pentoses, inactivation 701.
plants infection 9437.
radioactive labelling, enzyme-linked immunosorbent assay, radioactivity measuring techniques 8096.
replication, pathogenesis, *Nicotiana tabacum* 4038.
replication, ribonuclease inhibition, *Nicotiana tabacum* 6885.
resistance, relationship, proteins, hybrids, *Nicotiana glutinosa* × *Nicotiana glauca* 1334.
RNA degradation, ozone 1592.
strains competition, *Nicotiana sylvestris* infection 9449.
2-thiouracil, effects on, RNA biosynthesis, protein biosynthesis 5220.
transmission, *Vigna unguiculata*, role, Coleoptera regurgitation factors 6733.
- Tobacco necrosis virus,**
disease resistance induction, *Cucumis sativus*, *Fusarium oxysporum* f.sp. *cucumerum* wilt 465.
hypersensitive response, proteins, *Cucumis sativus* 3113.
infected, *Phaseolus vulgaris*, hypocotyls, light, effect on 2992.
infection, *Chenopodium amaranticolor*, antiviral agents isolation, characterization 8583.
infection, effects on protein composition, leaves, *Cucumis sativus*, *Vigna sinensis* 9460.
infection, *Nicotiana tabacum* tissues, peroxidase, laccase, ribonuclease, isolation 318.
infection, *Vigna sinensis*, *Cucumis sativus*, osmotic stress effects on enzymes 413.
infection, *Vigna unguiculata* susceptibility 2986.
isolation, British Isles rivers, infection, *Chenopodium* 4020.
- Tobacco rattle virus,**
corky ringspot, *Solanum tuberosum*, disease control 3112.
detection, enzyme-linked immunosorbent assay, hybridization analysis, *Narcissus*, tubers, *Solanum tuberosum* 6808.
distribution, association, infection, weeds 1244.
infection, *Nicotiana tabacum*, protoplasts, actinomycin D, effects on 7701.
- Tobacco ringspot virus,**
epidemiology, *Vaccinium corymbosum* 2161.
lost plants, *Arctium lappa* 6523.
infection, *Nicotiana tabacum*, protoplasts, actinomycin D, effects on 7701.
necrosis, *Malus pumila* 6783.
transmission (seed), *Solanum tuberosum*, symptoms 406.
Vigna unguiculata, role, Coleoptera regurgitation factors 6733.
- Tobacco streak virus,**
infection, *Helianthus annuus*, pathology, host range 9430.
isolation, *Solanum tuberosum*, characterization, host range 1290.
isolation, *Solanum tuberosum*, host range 2197.
plants infection, host specificity, pathogenesis, disease transmission 1126.
ringspot, *Ajuga reptans* 3043.
- Tobamovirus,**
infection, *Capsicum*, serotyping 4032.
- Tobramycin,**
antibacterial activity, antibiotic synergism, cefotaxime, carbenicillin,

Tobramycin, (continued)

- ampicillin, *Proteus*, *Pseudomonas aeruginosa* 7967.
antibacterial activity, bacteria clinical isolates, media analysis 7074.
antibacterial activity, comparison, dibekacin 2584.
antibacterial activity, *Pseudomonas* 7975.
antibacterial activity, *Salmonella* strains 8815.
antibacterial activity, *Serratia marcescens* 4384.
antibiotic sensitivity testing methodology comparison, gram-negative bacilli 6390.
antibiotic sensitivity testing, *Pseudomonas aeruginosa* 1600.
antibiotic sensitivity testing, *Pseudomonas aeruginosa*, methodology comparison 9761.
antibiotic synergism, azlocillin, *Pseudomonas aeruginosa* 8849.
antibiotic synergism, ceftazoxime, antibacterial activity, *Pseudomonas aeruginosa* 2534.
bactericidal activity, pharmacokinetics, in vitro 4386.
biosynthesis, *Streptomyces tenebrarius*, elements effects on 2585.
+ceftriaxone, antibiotic synergism, *Pseudomonas aeruginosa* 7986.
comparison N-formimidoyl thienamycin, antibacterial activity, bacteria clinical isolates 7076.
disc-diffusion test, streptococcus group D 2509.
+N-formimidoyl thienamycin, antibiotic synergism, antibacterial activity, *Streptococcus faecalis*, *Streptococcus faecium* 1623.
high-pressure liquid chromatography 8018.
β-lactam antibiotics inactivation 6108.
+β-lactam antibiotics, stability, storage 9710.
resistance, association, modification enzymatic, *Pseudomonas aeruginosa*, *Enterobacteriaceae* 540.
Streptomyces cremus, biosynthesis, media optimization 6227.
Streptomyces tenebrarius, biosynthesis, inoculum effects on 6232.
± ticarcillin, calcium, magnesium, zinc, effects on, antibacterial activity, *Pseudomonas aeruginosa* 754.
+vancomycin, antibiotic synergism, antibacterial activity, *Staphylococcus aureus* 771.
- Togavirus,**
antibodies, detection, enzyme-linked immunosorbent assay, methodology 1746.
hemagglutination, proteins stabilization 3545.
- Tolnaftate,**
antifungal activity, dermatophyte fungi 9682.
- o-Toluanilide,**
biodegradation, *Nocardia* 4763.
biodegradation, aerobic conditions 8436.
Touline red unheated serum test,
immunodiagnosis, syphilis 9913.
- Tolypocladium infatum,**
cyclosporin A-biosynthesis, pathways 8343.
cyclosporins, biosynthesis, characterization 132.
elavapeptin, purification, inhibition mitochondria adenosinetriphosphatase 5.
- Tolyposporium penicillariae,**
smut disease resistance, *Pennisetum americanum*, field trials screening 9455.
smut, pollination, *Pennisetum americanum*, effects on, pathogenesis 6777.
- Tolypotrachea tennae,**
nitrogen fixation, *Oryza sativa*, USSR 7846.
- Tomatine,**
Gymnosas reesii, biodegradation 3773.
- Tomatine,**
resistance, *Fusarium solani*, heritability, pathogenicity, *lycopersicon esculentum* fruits, ascorbic acid composition 7049.
resistance *Fusarium solani*, infection, pathogenicity, *Pisum sativum*, *Lycopersicon esculentum* fruits 6741.
- Tomato aspermy virus,**
infection, *Chrysanthemum*, epidemiology 8580.
- Tomato bunchy top virus,**
bunchy top, *Lycopersicon esculentum*, new records, India 3042.
- Tomato bushy stunt virus,**
cytopathology, *Gomphrena globosa* 4034.
disease resistance, leaves, *Gomphrena globosa* 1378.
disease transmission, *Lycopersicon esculentum*, vectors, man 1308.
infection, *Gomphrena globosa*, leaves hypersensitive response 2156.
like viruses identification, *Solanum melongena* isolates 8588.
- Tomato bushy virus,**
comparison, tombusvirus isolation, *Prunus*, identification 390.
- Tomato leaf curl virus,**
infection, *Lycopersicon esculentum*, factors affecting disease control 8614.
- Tomato mosaic virus,**
benzimidazole derivatives, antiviral activity 7951.
host-pathogen interactions 2094.
infection, *Lycopersicon esculentum*, interaction, *Fusarium oxysporum* f.sp. *lycopersici* 9397.
infection, *Pentas lanceolata*, new records, Australia 9450.
infectivity, herbicides effects on, *Datura metel* 7702.
persistence, soil, crop residues, infection, *Lycopersicon esculentum* 1233.
- Tomato ringspot virus,**
disease reservoirs, *Prunus* 1209.
disease spread, callus, *Chrysanthemum*, *Lycopersicon esculentum* 5793.
disease transmission, *Xiphinema rivei*, *Xiphinema americanum*, orchards 2142.
epidemiology, *Vaccinium corymbosum* 2161.
infection, *Vitis vinifera*, disease resistance 5054.
necrosis, decline, *Malus domestica*, *Xiphinema* vectors 4978.
Xiphinema americanum, transmission, *Taraxacum officinale* 8595.
- Tomato spotted wilt virus,**
detection, *Hydrangea macrophylla*, association weeds 5016.
host range, plants, New Zealand 6731.
infection, *Chrysanthemum*, epidemiology 8580.
- Tomato yellow leaf curl virus,**
disease spread, cultivation techniques, *Lycopersicon esculentum* 1236.
infection, *Lycopersicon esculentum*, Jordan 6793.
- Tomato yellow top virus,**
infection, *Lycopersicon esculentum*, new records, New Zealand 9435.
- Tomatoes,**
juices, canning, sterilization, baths 262.
juices, pectin protection, heat resistance, *Lactobacillus fermentum* 6660.
lactic acid fermentation, *Lactobacillus plantarum* 4833.
post-harvest decay, *Pseudomonas marginalis* soft rot, storage conditions 9453.
Rhizopus nigricans post-harvest decay, γ radiation+heat treatments+chemicals

Subject Index

Tomatoes, (continued)

control 2237

Tomaymycin,

synthesis, antibacterial activity 6191.

Tombusvirus,

isolation, Prunus, identification, comparison, petunia asteroid mosaic virus, tomato bushy virus 390.

Tongue,

beef, bacteria growth, packaging, cold storage 267.

Toothbrushes,

design, dental plaque removal 4463.

Toothbrushing,

dental plaque, man, comparison sodium chloride+hydrogen peroxide 8075.

dentifrices, effects on, formation, children, reviews 9824.

man, motor task performance, dental hygiene 7209.

Top rot,

Zeae mays, Brazil, Erwinia chrysanthemi pv.zeae 2141.

Topical application,

fluoride, dental caries prophylaxis, teeth, man 8996.

teeth, fluoride treatment, dental caries prophylaxis, man 8995.

Topical applications,

fluoride, man, dental hygiene equipment 5354.

Topography,

pH, Endomyces magnusii, fluorescent probes methodology 8169.

Tortricidae,

baculovirus, biological control 997.

biological control 8379.

biological control, baculovirus 998.

biological control, persistence, baculovirus 1005.

Cydia pomonella, granulosis virus biological control 8356.

Torula,

feeds additives, chickens 6682.

single-cell protein, feeding trials, chickens 3856.

Torula cremoris,

ethanol production, factors affecting 1046.

Torulopsis,

5-fluorocytosine drug sensitivity testing, media methodology 897.

Torulopsis candida,

production, UDP-glucose, UDP-galactose, radioactive labelling 6575.

Torulopsis ethanolitolerans,

biomass production, ethanol utilization 9120.

feeds, protein composition, association, temperature 1087.

Torulopsis glabrata,

antibiotic resistance, amphotericin B 3308.

antifungal activity, naphtho(1,2,3)-thiazoles derivatives 7092.

cell distribution, methodology 2724.

drug sensitivity testing, efficacy, antimicrobial agents efficacy 9702.

Torulopsis holmii,

sugars fermentation, ethanol production 3747.

Torulopsis magnoliae,

acidity, heat inactivation, yeasts 5636.

heat inactivation, fruit yeasts 2039.

Torulopsis whickerhamii,

cellobiose fermentation 4744.

N-Tosyl-L-phenylalanylchloromethane,

chemical modification elongation factor Tu cysteine residues, Escherichia coli 126.

Tovornita brasiliensis,

coumarins, fungi, effects on 7789.

Toxic shock syndrome,

Staphylococcus aureus isolates, endotoxins, exotoxins, characterization 6706.

Toxicants,

organic compounds, soil microorganisms decomposition, land disposal, reviews 5977.

reviews, soil microorganisms decomposition, land disposal, reviews 5977.

Toxicity,

aflatoxin B1, detoxification, ammonium hydroxide, sodium hypochlorite, sodium hydroxide 278.

aflatoxin B1, mycotoxins pretreatment effects on, Drosophila melanogaster 7617.

aflatoxins, cattle, reviews 283.

aflatoxins, mechanisms, plants, reviews 5647.

Bacillus thuringiensis δ -endotoxin, stability, use biological control,

larvae, Culiidae 294.

Bacillus thuringiensis subsp.israelensis spores, biological control, Aedes

aegypti 4713.

Bacillus thuringiensis subsp.kurstaki, Platynota idaeusalis larvae, association

formaldehyde dietary intake 7498

Beauveria, toxins, biological control, Epirix 1106.

bioassays, aflatoxin M1, milk 3877.

carminomycin derivatives, production, antitumor activity 7166.

chick embryos, ochratoxin A, \pm citrinin 2068.

Clostridium perfringens, food contamination 208.

Curlularia, Alteraria, association, black tip, rice 3863.

enterotoxins, vibrio cholerae, Escherichia coli, animal models 2957.

heavy metals, thermophilic bacteria, sewage sludge, digestion (anaerobic) 8063.

Heliopsis zea nuclear polyhedrosis virus, pest control, Heliopsis 1041.

laboratory animals, domestic animals, Escherichia coli toxins, gene transfer,

phages conjugation 9315.

lactates, biological control, Bacillus thuringiensis, Culex quinquefasciatus,

Aedes aegypti, Anopheles albimanus, Anopheles quadrimaculatus 8390.

methyl bromide+chloropicrin, sclerotia, Sclerotium rolfsii, Verticillium

albo-atrum, relative humidity effects on 499.

mutagenicity, hydrazine derivatives, Bacillus thuringiensis metabolism, Salmonella

typhimurium, correlation, animals 1095.

nickel, Achlya, Saprolegnia, Cunninghamella blakesleeana, Aspergillus clavatus,

Aspergillus flavus 1355.

pericycuro, animal models, Mammalia 3155.

pest control, Bacillus thuringiensis, Culiidae 297.

pest control, bacteria, Simuliidae 298.

sewage sludge, animal models, man 3489.

speridomolides, role superoxide radicals formation, in vitro 274.

Stachybotrys atra, sheep, mycotoxins isolation, bedding straw 4897.

Toxicity testing,

aluminum, manganese, Aspergillus flavus spores use 9076.

Chaetomium cellulolyticum, single-cell protein, laboratory animals, chickens,

sheep 9116.

Toxicity testing, (continued)

detergents, Pseudomonas fluorescens 2874.

endotoxins, Limulus lysate test, legislation 6712.

mycotoxins, Fusarium 2315.

single-cell protein, Basidiomycetes, animal models 9113.

water, bioassays, luminous bacteria 3572.

water pollution, bacteria 6241.

Toxicogenicity,

Bacillus cereus, Staphylococcus, contamination, infants food 8464.

Clostridium botulinum, growth, nitrite inhibition, organoleptic properties,

sausages 303.

Clostridium sorrellii, cytotoxins, media (culture) 6719.

enterotoxins, Staphylococcus aureus 7631.

enterotoxins, Staphylococcus aureus isolates, milk 6716.

toxicity, Clostridium botulinum, growth, effects on, seafood 309.

T toxin,

biosynthesis, cochlidiobolus heterostrophus 2072.

production, Cochlidiobolus heterostrophus races 288.

T-2 Toxin,

binding dehydrogenase active sites, Saccharomyces cerevisiae 7625.

biosynthesis, metabolism, pathway, Curatobacterium 8520.

biosynthesis, radioactive labelling, Fusarium tricinatum 6705.

contamination, feeds 3868.

enzyme-linked immunosorbent assay, Fusarium tricinatum 4891.

Fusarium, effects on growth, Saccharomyces cerevisiae, Saccharomyces

carlsbergensis 3876.

metabolites, structure, cattle 3884.

α -Toxin,

Staphylococcus aureus, amino acid composition 2076.

staphylococcus aureus, production, association, growth 6709.

Toxin A,

Clostridium difficile, enzyme-linked immunosorbent assay 9303.

Toxins,

Amanita phalloides, mushroom poisoning treatment, man 5612.

Ascheronia aleyrodis, production, relationship culture 7627.

Ascochyta pisi, role pathogenicity, necrosis, Pisum sativum 1140.

Bacillus cereus, production, goats meat, frozen foods 5606.

Bacillus, production, genetic engineering 987.

Bacillus thuringiensis, pathogenesis, Bombyx mori larvae midgut cells 3738.

Bacillus thuringiensis, use biological control, Insecta 5564.

Beauveria, toxicity, biological control, Epirix 1106.

biosynthesis, Clostridium botulinum, carbon dioxide effects on 5658.

biosynthesis, factors affecting, Bacillus thuringiensis var.israelensis,

association, Culiidae larvae lethality 306.

biosynthesis, Penicillium roqueforti 6695.

biosynthesis, Salmonella, cultural characteristics effects on 8519.

Bordetella pertussis, binding haptoglobulin, enzyme-linked immunosorbent assay

6720.

Bordetella pertussis, reviews 7630.

cholera, biosynthesis, Vibrio mimicus, Vibrio cholerae 9314.

clitidine, structure, Clitocybe acromelagae 4907.

Clostridium botulinum, characterization 7636.

Clostridium botulinum, characterization, food contamination, preservatives 7637.

Clostridium botulinum, enzyme-linked immunosorbent assay 9293.

Clostridium botulinum, production, growth, cheese 2074.

Clostridium botulinum, production, relationship gas production 2960.

Clostridium botulinum, purification, characterization 2077.

Clostridium difficile, Clostridium botulinum, identification, lethality, mice

2080.

Clostridium difficile, counter immunoelectrophoresis detection, feces 4912.

Clostridium perfringens, food contamination, conferences 5453.

Clostridium perfringens, food poisoning, man, USA 2958.

Clostridium tetani, amino acid composition, comparison light chains, heavy chains

4906.

Clostridium tetani, crystals characterization 3890.

Clostridium tetani, structure, reviews 2078.

Corynebacterium diphtheriae, purification, gel chromatography 8514.

Corynebacterium diphtheriae, structure, toxicity, reviews 6724.

Escherichia coli, purification, characterization 2952.

extraction, spores, Bacillus sphaericus 5662.

feeds contamination, microorganisms, quality control 4862.

fungi, production, detection methodology 4542.

gene transfer, Escherichia coli, phages conjugation, toxicity, laboratory

animals, domestic animals 9315.

Helminthosporium carbonum cyclic peptides, conformation, N.M.R. 7618.

Helminthosporium sacchari, helminthosporiosis, structure 8508.

Helminthosporium sacchari, structure 7629.

histopathology, midgut, Bacillus sphaericus, Culiidae 1022.

lethal dose determination, animal models 9841.

parabens, effects on, Clostridium botulinum, production 2089.

pertussis, biosynthesis, Bordetella pertussis,

heptakis(2,6-O-dimethyl- β -cyclodextrin) effects on 8523.

production, Clostridium botulinum, food contamination, cheese products 2943.

production, Escherichia coli, isolates, man, cattle 1112.

production, iron effects on, Corynebacterium diphtheriae, mutation association

3889.

production, plasmids, genetic control, Bacillus anthracis 2085.

purification, characterization, Escherichia coli, comparison Shigella dysenteriae

4009.

Ricin, communis, interferon conjugation, antiviral activity 3348.

Saccharomyces cerevisiae, purification, characterization 1097.

Staphylococcus aureus, purification methodology, separation techniques 4917.

subunit structure, Bordetella pertussis 302.

tetanus, blood donors, antibodies, screening, latex agglutination 3621.

Vibrio cholerae, agglutination measuring techniques 9302.

Vibrio cholerae, radioimmunoassay 9294.

Toxoids,

Naja naja siamensis, antiviral activity, herpes simplex virus 1 7102.

preparation, photoaffinity labelling use, Pseudomonas aeruginosa exotoxin A 8050.

TPHA test,

detection, Treponema pallidum, blood donors, man 5394.

diagnosis, syphilis 2665.

Trace elements,

cheese whey, effects on Candida intermedia 3817.

effects on Streptomyces tenebrarius tobramycin biosynthesis 2585.

enrichment, bacteria, role, manganese oxidation 9816.

Trace elements, (continued)

milk, activity relationship, propionic acid bacteria, lactic acid bacteria 8477.

Tracers,

radioactive labelling, screening, antibiotics biosynthesis, Actinomycetes, soil microorganisms, micromethods 9882.

Trachea,

washings, chickens, detection, Mycoplasma gallisepticum inhibitors 6302.

Trachypogon,

grasslands, nitrogen cycle 2372.

Trametes corrugata,

post-harvest decay, *Hevea brasiliensis* cellulose, lignins, Malaysia 7791.

Trampling,

human impact, soil microorganisms, population levels, forests 4133.

Transcription,

Escherichia coli, rifampicin effects on 1627.
nitrogenase genes, *Rhizobium meliloti*, nodulation, *Medicago sativa* 3228.
RNA, polyoma virus infected cells, actinomycin D resistance 3306.

Transduction,

methodology, *Escherichia coli* adenylate cyclase deletion mutant 5401.

Transferin,

antibacterial activity, relationship microflora immune response, Mammalia, reviews 5176.

Transformation,

anthracycyclinones, *Streptomyces coelicolor*, *Streptomyces galilaeus* 782.
chickens embryo cells, *Rous sarcoma virus*, antiviral activity,
2-nitronaphthofuran derivatives 3362.
daunomycin, antibiotic synergism, antibacterial activity, *Streptomyces erythromyces* sp. nov. 675.
Escherichia coli, plasmids, antibiotic resistance, association, cadmium sensitivity 1536.
nitroaromatic compounds, sewage, microorganisms 5288.
1-nitroethylene, anaerobic bacteria, intestinal microflora, man 2024.
Saccharomyces diastaticus, protoplasts fusion, exo-1,4- α -D-glucosidase production 7323.
steroids, immobilized cells, bacteria, fungi, reviews 3706.
streptomycin resistance markers, factors affecting, *Acinetobacter calcoaceticus* 7895.

Translocation,

SV40, use, *Xeroderma pigmentosum* cell lines methodology 9868.

Transformed cells,

Moloney sarcoma virus, fibroblasts, growth, interferon inhibition 3369.

Transferrin,

SV40, mRNA isolation, membrane filtration 829.

Transketolase,

active sites arginine residues, 2,3-butanedione chemical modification, effects on kinetics, *Saccharomyces cerevisiae* 7355.
2,3-butanedione chemical modification, effects on kinetics, *Saccharomyces cerevisiae* 6555.
Saccharomyces cerevisiae, purification, characterization 6425.
substrate specificity 7353.
X-ray crystallography, *Saccharomyces cerevisiae* 6551.

Translocation,

carbon, Hordeum, brown rust 6769.
Hordeum vulgare, powdery mildew, *Erysiphe graminis* f.sp. hordei 3935.
nutrients, brown rust, Hordeum vulgare 3939.

Transmission,

Manihot esculenta, cassava latent virus mosaic disease, Nicotiana benthamiana tissues ultrastructure 1315.
nuclear polyhedrosis virus, Hyphantria cunea 1044.
pea enation mosaic virus, Acyrthosiphon pisum 2107.
pea streak virus, Acyrthosiphon pisum, *Medicago sativa*, Pisum sativum 3908.
potato virus Y, *Brachycaudus helichrysi* 4044.
viruses, infection, Trifolium repens, pathology, association, Aphididae filters prevention 1147.

Transmission (horizontal),

pumpkin mosaic virus infection, Cucurbita maxima, Aphis craccivora vectors 1231.
Transmission (mechanical),
dasheen mosaic virus, *Richardia africana*, Araceae 9420.
potato yellow dwarf virus, density variability, *Nicotiana rustica* 6805.
tulip breaking virus, Lilium longiflorum, *Chenopodium* 7707.

Transmission (seed),

Andean potato latent virus, potato virus T, arracacha virus B, tobacco ringspot virus, Solanum tuberosum, symptoms 406.
beet mild yellowing virus, Beta vulgaris 8586.
cowpea chlorotic mottle virus infection, Vigna unguiculata, disease resistance 332.
cowpea mosaic virus, screening association prevention, Vigna unguiculata 1124.
Fusarium oxysporum, damping-off, *Pseudocercosia menziesii* 4149.
role, Macrophoma phaseolina infection, Cucumis melo 3979.

Transport,

swabs, systems, anaerobic bacteria recovery 6333.
system, swabs, anaerobic bacteria survival, temperature association 6334.

Transposons,

transposon Tn2401 identification, Pseudomonas aeruginosa, association aminoglycoside antibiotics resistance 7050.
transposon Tn2424 mediation, amikacin resistance, Pseudomonas aeruginosa, *Escherichia coli* 7899.
transposon 5, *Rhizobium meliloti*, mutants, *Medicago sativa*, nodules, ultrastructure 7848.

Tranzschelia discolor,

rust, host range, population, Prunus domestica subsp. domestica, Prunus domestica subsp. insititia 3967.

Traveller's diarrhea,

vaccines development, man 8048.

Trees,

Amillaria mellea pathogenicity, role tannic acid stimulation rhizomorphs formation 1455.
cultivation, mycorrhizas, role reviews 7780.
ectomycorrhizas, nutrient transport, absorption, carbon sources, nitrogen sources 9505.
exudates, yeasts isolation, identification, host specificity, population dynamics 2295.
forests, Cyndrodium scoparium diseases, Malaysia 2316.
mycoplasma-like organisms infection, antibiotics treatment 5859.
ornamental plants, plant diseases, fungi, fungicides 9480.

Trees, (continued)

roots, stems, isolation, Cyndrodium, Fusarium, media (selective) 6352.
seed-borne fungi, fungicides, antifungal activity 2319.
seedlings, mycorrhizas inoculation 5857.
seedlings, root rot, Phytophthora cinnamomi 1463.
seedlings, vesicular-arbuscular mycorrhizas, phosphate uptake 9503.
silviculture, disease control, Phytophthora root rot 2317.
succession, association nitrification, forests 4140.
symbiosis, mycorrhizas, screening 3162.
Tanzania forests, mycorrhizas symbiosis 2296.
wind barriers, fungi infection, distribution 4175.
 α , α -Trehalose-2,3,4,2'-tetraesters,
production, Rhodococcus erythropolis 4709.
Trematophora circinans,
root rot, crown rot, *Medicago sativa*, USA, South Dakota 8532.
Tremella mesenterica,
sex hormones, tremmerogen A-10, tremmerogen a-13, purification, amino acid sequence 915.
Tremmerogen A-10,
Tremella mesenterica, sex hormones, purification, amino acid sequence 915.
Tremmerogen a-13,
Tremella mesenterica, sex hormones, purification, amino acid sequence 915.
Treponema,
intestinal microflora, salinomyx administration effects on, pigs 5624.
Treponema hyodysenteriae,
drug sensitivity testing, dimetridazole 8768.
hemolysis biosynthesis 2090.
Treponema pallidum,
syphilis, diagnosis, TPHA test, hemagglutination 2665.
syphilis, fluorescent antibody test, diagnosis, man 863.
syphilis, immunodiagnosis, fluorescent antibody test 9918.
syphilis, immunodiagnosis, rapid plasma reagin test 9917.
syphilis, immunodiagnosis, rapid plasma reagin test, toluidine red unheated serum test 9913.
TPHA test detection, blood donors, man 5394.
Treponema phagedenis,
 β -D-galactosidase, purification, characterization 7410.
Triacylglycerides,
hydrolysis, triacylglycerol lipase, immobilized enzymes, Candida cylindracea 5501.
Triacylglycerol lipase,
biosynthesis, Penicillium funiculosum, growth conditions 4656.
Candida cylindracea, immobilized enzymes, triacylglycerides hydrolysis 5501.
Geotrichum asteroides, purification 7341.
Geotrichum candidum, carbon sources, effects on, biosynthesis 102.
isoenzymes, purification, characterization, Oospora lactis 7354.
levels, Trichophyton rubrum resistant mutant, undecanoic acid drug resistance 7877.
production, carbon sources, nitrogen sources, Geotrichum candidum 7320.
Pseudomonas aeruginosa, polysaccharides effects on biosynthesis 1945.
Pseudomonas fluorescens extracellular enzymes, purification, characterization 5491.
purification, characterization, staphylococcus aureus 1876.
Saccharomyces lipolytica, purification, characterization 6463.
Triacylglycerols,
biodegradation, microorganisms 2881.
Triademenol,
diastereoisomers, antifungal activity 693.
Triadimenol,
antifungal activity, tolerance, Ampelomyces quisqualis 1401.
detoxification, Ampelomyces quisqualis 6883.
disease control, leafspot, Mycosphaerella muscicola, Musa 4127.
disease control, powdery mildew, Hordeum vulgare 9489.
var. ellipti 9516.
disease control, Triticum aestivum powdery mildew 1422.
foliar applications, Begonia, powdery mildew, antifungal activity 1393.
powdery mildew control, Rosa 5044.
treatment, Erysiphe graminis powdery mildew, Triticum, drug resistance 2126.
treatment, pythium infection, Gramineae 4114.
treatment timing, Rhynchosporium secalis leaf blotch, Hordeum, disease control 488.
use, ornamental plants disease control 5056.
Triadimenol,
seed treatments, Gaumannomyces graminis var. tritici, take-all, Triticum aestivum 5067.
Trialeurodes vaporariorum,
disease transmission, beet yellows virus infection, Cichorium endivia, Lactuca sativa, Cucumis sativus 9431.
pest control, biological control, Verticillium lecanii, Cucumis sativus 126.
1,2,3-Triazolinones,
antibacterial activity 4293.
1,2,4-Triazole[3,4-c]-1,2,4-dithiazoles,
antifungal activity, Helminthosporium oryzae, Fusarium oxysporum 8788.
Tribulus terrestris,
association Hydrangea macrophylla, tomato spotted wilt virus detection 5016.
Tricarboxylic acid cycle,
activity, Aspergillus terreus, relationship itaconic acid biosynthesis 9132.
carbohydrates metabolism pathways, bacteria enzymes 123.
metabolites, association, *Rhizobium lupini* amino acids biosynthesis 8199.
1,2,4-Trichlorobenzene,
biodegradation, microorganisms, seasonal variations, water salinity effects on, aquatic environment 2876.
2,3,6-Trichlorobenzonic acid,
bacteria, dehalogenation, lakes, sediments 6648.
2-(2,4,5-Trichlorophenoxy)propionic acid,
effects on, *Poso praensis* sugars, amino acids, Drechslera sorokiniana pathogenesis 5718.
2,4,5-Trichlorophenoxyacetic acid,
biodegradation, Pseudomonas cepacia 1059.
2,4,5-Trichlorophenyl acetate,
biodegradation, Pseudomonas cepacia, soil contamination 4750.
Trichocoenelia padwickii,
infection, Oryza sativa, detection methodology 4963.
Trichoderma,
biodegradation, carbohydrates, straw 8442.

Trichoderma, (continued)

- cellulase activity, crop residues, ethanol production 4727.
- cellulase activity, ethanol production 1047.
- cellulase, kinetics 4596.
- cellulolytic enzymes production 7418
- cellulose biodegradation, straw 7539.
- colonization, *Sorghum bicolor* stalks, roots 5715.
- Cytoporus biosynthesis* 7992.
- disease control, blight, *Sclerotium rolfsii*, *Poa* 1402.
- fungi flora, *Fagus grandifolia* bark 1438.
- immobilized cells, β -glucosidase, hydrolysis, cellobiose, salicin 3791.
- lignocellulose biodegradation, screening 3795.
- media (isolation), soil, methodology 2711.
- soil microorganisms, growth, spore germination, ammonia, volatiles, effects on 2349.
- submergence, water pollution effects on 8977.
- wood cellulose hydrolysis, ethanol production, *Zymomonas mobilis*, *Saccharomyces cerevisiae* 3750.
- Trichoderma aureoviride**,
 β -D-glucosidase secretion, fermenters 5511.
- Trichoderma hamatum**,
infection, *Pseudotsuga menziesii* roots, incidence 4162.
- Pseudomonas* antagonism, *Psium sativum* seeds, association, *Pythium* rot, biological control 5820.
- Trichoderma harzianum**,
antagonism, *Sclerotium rolfsii* sclerotia, factors affecting, soil 9570.
- biodegradation, straw, role, soil, volcanic ash, stabilization 5091.
- biological control, damping-off, *Rhizoctonia solani*, in vitro 2854.
- bulbs treatment-soil solarization, integrated control, soil-borne diseases, Indaeae 7768.
- cellulase, hydrolysis, cellulose, crop residues, heat+grinding 6650.
- leaf litter biodegradation 3771.
- lytic enzymes, use, control, *Fomes annosus* 4156.
- parasitism, *Rhizoctonia solani*, detection, photography, methodology 8159.
- post-harvest decay, storage, apples 8602.
- Trichoderma konigii**,
biodegradation, cellulose 5594.
- cellulolytic enzymes production 7418.
- β -D-glucosidase, purification, characterization 2767.
- serine proteinase, purification, characterization 20.
- Trichoderma lignum**,
cellulolytic enzymes production 7418.
- serine proteinase, purification, characterization 20.
- Trichoderma longibrachiatum**,
cellulase, endo-1,3- β -D-xylanase, polygalacturonase, production, carbon sources effects on 3678.
- Trichoderma pseudokoningii**,
 β -D-glucosidase, exo-1,3- β -glucanase, biosynthesis, carboxymethylcellulose stimulation 7423.
- Trichoderma reesei**,
cellulase activity 1926.
- cellulase activity association substrates, relationship, crystallinity 8312.
- cellulase adsorption characterization, lignocellulose fermentation 7530.
- cellulase assays 9158.
- cellulase, bagasse hydrolysis, bioreactors 9152.
- cellulase, degradation, straw, *Triticum aestivum* cultivars effects on 8415.
- cellulase elution 1928.
- cellulase excretion kinetics 8254.
- cellulase, exo-cellobiohydrolase, β -D-glucosidase, purification, characterization 9146.
- cellulase, high-performance liquid chromatography 7365.
- cellulase, hydrolysis, bagasse, straw, *Oryza sativa* 7430.
- cellulase, hydrolysis, cellulose, kinetics 9154.
- cellulase, hydrolysis, hemicellulase 9157.
- cellulase, immobilization, glycoprotein composition 68.
- cellulase, kinetics, hydrolysis, cellulose 3789.
- cellulase production 2752.
- cellulase production, bagasse, pretreatment, γ radiation+sodium hydroxide 8449.
- cellulase, production, batch culture, methodology, comparison 9068.
- cellulase production, media (culture) 6526.
- cellulase production, spore germination, Indole-3-acetic acid, gibberellic acid, effects on 8320.
- cellulase, wood pulp hydrolysis 9256.
- cellulose fermentation, β -D-glucosidase, ethanol, effects on glucose biosynthesis 4705.
- cellulose hydrolysis, pretreatment effects on 3676.
- crop residues fermentation, gases environments, reviews 4723.
- enzymes, cellulose hydrolysis 1056.
- hydrolysis, cellulase, *Helianthus annuus* seeds coats, autohydrolysis-explosion pretreatment effects on 9136.
- immobilization, use, radiation polymerization 7262.
- para-celsin, isolation, characterization 8010.
- polygalacturonase, biosynthesis, activity 8309.
- protein biosynthesis, use, sugar beets industrial wastes, animals feeds 8493.
- sphaeroplasts formation, use, lytic enzymes 6346.
- spore germination, cellulolytic enzymes release 7331.
- strains comparison, cellulase production 8325.
- Trichoderma viride**,
biological control, Dutch elm disease, *Ulmus* 6613.
- cellulase, cellulose hydrolysis 8318.
- cellulase, hydrolysis, *Zea mays* crop residues, pretreatment, heat+sodium hydroxide 8448.
- cellulase, kinetics, hydrolysis, cellulose 3789.
- cellulase, lignocelluloses hydrolyses, dinitrosalicylic acid assays, sugars 9073.
- cellulase, role, silage, *Medicago sativa*, *Lolium perenne*, *Trifolium pratense* 2931.
- cellulolytic enzymes biosynthesis, culture systems effects on 1925.
- cellulolytic enzymes, glucose production, cotton wastes 6653.
- chemotropism, association, wood volatiles 3765.
- enzymatic activity, cellulase wastes conversion, bioreactors 9172.
- exo-1,4- α -D-glucosidase, hydrolysis, starch 6499.
- fensholtion biodegradation 7538.
- infection, *Pseudotsuga menziesii* roots, incidence 4162.
- mixed culture, lignocellulose, biodegradation *Paeicomyces fusisporus* 3772.

Trichoderma viride, (continued)

- oxygen transfer rates, effects on, cellulase production 3671.
- pectinolytic enzymes 5528.
- phosfolan biodegradation 5586.
- purification, α -D-glucan hydrolyase, β -D-glucan hydrolyase 6538.
- soil, herbicides effects on 8707.
- tolerance, antifungal activity, thiabendazole, thiophanate methyl, antifungal activity 3154.
- trifuratin biodegradation 8446.
- tyrosine aminotransferase, purification, characterization 947.
- Tricholomopsis platyphyla**,
Armillaria bulbosa, population dynamics, nutrient cycles, decomposition, Basidiomycetes, wood, *Quercus robur* 5861.
- soil microorganisms, forests, population studies, spatial distribution 1445.
- tricholomopsis, forests 1437.
- Trichomonas vaginalis**,
metronidazole antibacterial activity, association, antagonism, acetic acid, lactic acid 7090.
- Trichophyton**,
incidence, soil, Germany, Fed. Rep. 3185.
- isolation, floors, education institutions 8983.
- Trichophyton esjelii**,
biodegradation, wool, agrochemicals, effects on 5593.
- Trichophyton asteroides**,
antifungal activity, *Petriella guttulata* antibiotic WF-3161 7451.
- Trichophyton equinum**,
enzymes biosynthesis, media (culture) 3630.
- Trichophyton mentagrophytes**,
antifungal activity, benzenedithiols 2473.
- antifungal activity, pentachloronitrobenzene metabolites 8789.
- antifungal activity, tioaxoprofen, mitochondria, respiration uncouplers 8786.
- fungistasis, transform 8792.
- imidazoles, derivatives, antifungal activity 2480.
- 2-mercaptobenzemethanethiol diesters antifungal activity 3340.
- Trichophyton rubrum**,
antifungal activity, naphtho(1,2,3)-thiazoles derivatives 7092.
- antifungal activity, pentachloronitrobenzene metabolites 8789.
- antifungal activity, substituted phenols, structure-activity relationships 3338.
- antifungal activity, tioaxoprofen, mitochondria, respiration uncouplers 8786.
- dianil sulfides, antifungal activity 2482.
- phospholipids metabolism, antifungal activity, undecanoic acid 7931.
- resistant mutant, undecanoic acid drug resistance, triacylglycerol lipase, keratinase, phospholipase A, levels 7877.
- Trichopulsa**,
biological control, baculovirus 998.
- Trichopulsa nl**,
biological control, nuclear polyhedrosis virus, *Brassica oleracea*, pest control 6596.
- nuclear polyhedrosis virus infection, detection, enzyme-linked immunosorbent assay 2656.
- Trichosporon**,
ethanol production 7527.
- Trichosporon capitatum**,
lignin biodegradation 1998.
- Trichosporon cutaneum**,
cheese whey conversion, single-cell protein production 9286.
- endo-1,4- β -D-xylanase, purification, characterization 1859.
- Trichosporon fermentans**,
cell biodegradation 2877.
- Trichosporon penicillium**,
endo-polygalacturonase characterization 91.
- Trichothecene**,
Trichothecium roseum, biosynthesis 2575.
- Trichothecin**,
mycotoxins, densitometry 287.
- Trichothecium roseum**,
canker, *Rosa*, disease control, fungicides 1410.
- rot, post-harvest decay, potatoes 1325.
- spore germination, fungicides effects on, in vitro 7764.
- trichothecene biosynthesis 2575.
- Trichuris spiralis**,
mixed culture, lignocellulose biodegradation 3772.
- Trickling filters**,
wastewater treatment, microorganisms 5295.
- Tricothecium roseum**,
spoilage effects on seeds germination, *Vigna catjung* 3919.
- Tricyclazole**,
blast, *Oryza sativa*, effects on *Puccinia oryzae* pathogenesis 5827.
- effects on *Colletotrichum lagenarium* hyphal tips, pigmentation, plants penetration 325.
- Tridecane**,
biodegradation, metabolic pathways, α,ω -tridecanedioic acid, *Candida tropicalis* 2002.
- α,ω -tridecanedioic acid,
metabolic pathways, biodegradation, tridecane, *Candida tropicalis* 2002.
- production, *Candida tropicalis* immobilized cells 1840.
- Tridemorph**,
disease control, powdery mildew, *Hordeum vulgare* 9489.
- effects on *Erysiphe graminis* f.sp.hordei 4128.
- Entomophthoraceae infection, *Aphis fabae*, effects on 489.
- treatment, association, *Erysiphe graminis* infection, *Hordeum*, pathogenicity 485.
- Triethylin bromide**,
inactivation hexokinase, yeasts 9149.
- inactivation triethylin bromide, yeasts 9173.
- Trifluorothymidine**,
antiviral agents, cytomegalovirus (human) 3347.
- 5-Trifluorothymidine**,
antiviral activity, amantadine, antiviral activity 6063.
- Trifurallin**,
biodegradation, fungi 8446.
- Fusarium oxysporum*, crop exudates, effects on rhizosphere microorganisms, population density 8706.
- specificity, cell cycle, *Schizosaccharomyces pombe* 690.
- Tritolium**,
bacteroids viability, *Rhizobium* 7860.
- crop fields, agricultural practices, denitrification, crop fields, mineralization

Trifolium, (continued)

8680
denitrification, nitrification, mineralization, crop fields, *Trifolium* 8680.
plant debris, decomposition, leaching, soil microorganisms 566.
Rhizobium trifolii inoculation, association soil improvement, British Isles 6953.
root rot fungi infection, effects on yield 2104.
root rot, susceptibility, *Phytophthora erythroseptica*, *Phytophthora megasperma*, mixed infection, bean yellow mosaic virus 335.
survival improvements, *Rhizobium trifolii* inoculation 5953.
vesicular-arbuscular mycorrhizas, morphology comparison 6938.
white clover mosaic virus strains infection 2995.

Trifolium alpinum,

roots colonization, *Rhizobium trifolii*, fluorescent antibody test 6991.

Trifolium incarnatum,

genotypes, *Rhizobium trifolii* strains nodulation, relationship nitrogen fixation 7847.

Rhizobium trifolii experimental infection, nitrogen fixation, lines 430.

Rhizobium trifolii nitrogen fixation, heritability 7829.

Sclerotinia trifoliorum, infection, apothecia, development 2106.

Trifolium pratense,

disease reservoirs, tomato ringspot virus, prunus 1209.

disease resistance, white clover mosaic virus 331.

endomycorrhizas, vesicles ultrastructure 6974.

nitrogen fixation, pasture 6981.

root rot, *Fusarium* 5681.

Sclerotinia trifoliorum root rot, disease resistance 2251.

silage, *Trichoderma viride*, cellulase, role 2931.

Trifolium repens,

alfalfa mosaic virus, plant diseases, pathology 2996.

bacteria infection, effects on, nodulation, yield 2226.

disease resistance, white clover mosaic virus 331.

+ endomycorrhizas, effects on yield 2330.

Gigaspora margarita, mycorrhizas, hydroponics culture 2716.

Gigaspora margarita symbiosis, potassium permanganate effects on 8671.

growth, inhibition, infection, clover yellow vein virus± *Trifolium repens* 2100.

hydrogen, gas production, *Rhizobium trifolii*, nodulation 3245.

inoculation, *Glomus mosseae*, *Glomus etunicatus* 2348.

leafspot, *Pseudomonas andropogonis*, pathology 9320.

mycorrhizas association, Brassica effects on growth 585.

mycorrhizas, roots colonization, seasonal variations 554.

nitrogen fixation, acetylene reduction, diurnal variations 609.

nitrogen fixation, association *Rhizobium* host range specificity 602.

nitrogen fixation, nitrogen-fixing bacteria, grasslands, pollution effects, heavy metals 8686.

nitrogen fixation, nodulation, growth, light wavelength effects on 9589.

nitrogen fixation, pasture 6981.

nitrogen fixation, yield, nitrogen fertilizers effects on 2364.

nodulation, *Rhizobium trifolii* strains, inoculation 608.

nodules, *Rhizobium trifolii* bacteroids, scanning electron microscopy 8676.

peanut stunt virus isolation, USA, Arkansas 1127.

Rhizobium trifolii symbiosis, nitrogen fixation 7003.

Rhizobium trifolii symbiosis, soil pH, acidity, effects on, measuring techniques 4235.

Rhizoctonia root rot, etiology 8537.

root rot, *Fusarium* 5681.

roots exudates, lectins, binding capsules, *Rhizobium trifolii* 1508.

roots, interaction, vesicular-arbuscular mycorrhizas 5893.

roots invasion, fungi, Nematoda 5692.

roots, *Pythium* irregular, *Phytophthora megasperma*, soil microorganisms, infectivity 350.

roots, *Rhizobium trifolii* attachment, nitrate inhibition 4242.

soil microorganisms, *Rhizobium trifolii*, factors affecting competitiveness 611.

viruses infection pathology, association, Aphididae filters prevention transmission 1147.

Trifolium subterraneum,

Cercospora zebrina infection, new records, Australia 8538.

growth, *Glomus fasciculatus*, phosphate fertilizers 9547.

nitrogen fixation, *Rhizobium* 2366.

nitrogen-15 distribution, bacteroids, nodules, *Rhizobium*, nitrogen fixation 9615.

nodulation, competition, *Rhizobium trifolii* 5116.

roots, carbohydrates levels, nutrient availability phosphorus, endomycorrhizas 9676.

roots, mycorrhizas, phosphate, cations uptake 559.

symbiosis, mycorrhizas, effects on nitrate reductase (NADH) 6997.

vesicular-arbuscular mycorrhizas, effects on, growth 6942.

Trifolium temense,

root rot, *Myrothecium roridum*, *Myrothecium verucaria* 9329.

Trifolium vesiculosum,

physiological disorders, tissues, association, fungi 8544.

Triforine,

control, post-harvest decay, *Botryodiplodia theobromae* rot, bananas 5804.

disease control, *Sphaerotheca fuliginea*, powdery mildew, *Cucumis sativus* 2275.

effects on *Conidiobolus obscurus* resting spores spore germination 7762.

foliar applications, Begonia, powdery mildew, antifungal activity 1393.

powdery mildew control, Rosa 5044.

Trigeminal nerve,

ganglia, mice, herpes simplex virus infection, 9-(2-hydroxyethoxymethyl)guanine treatment effects on reactivation 7107.

Trigonella foenum-graecum,

nodules, ammonia assimilation, bacteroids, nitrogen fixation 3242.

1,2,8-Trihydroxy-octahydroindolizine,

Rhizoctonia leguminicola, characterization 7500.

Trimethoprim,

analogs, antibacterial activity 6035.

antibacterial activity 8779.

antibacterial activity, nasopharynx isolates 7066.

antibacterial activity, sulfonamides synergism, pharmacokinetics 4289.

antibiotic resistance plasmids, Enterobacteriaceae, distribution 3302.

antibiotic resistance, plasmids, gram-negative bacteria, isolation, characterization 7872.

Bordetella pertussis, drug sensitivity testing 7133.

Campylobacter fetus, subsp. jejuni, drug sensitivity testing 4292.

drug resistance, bacteria, reviews 3293.

drug resistance, clinical isolates, nosocomial environments 2399.

drug resistance, Enterobacteriaceae, gene transfer, plasmids 3298.

Trimethoprim, (continued)

drug resistance, Enterobacteriaceae, urinary tract isolates, British Isles 6007.

drug resistance, gram-negative bacilli, epidemiology, genetic analysis 6001.

drug resistance mechanisms, bacteria 6000.

drug resistance mechanisms, bacteria, clinical isolates 5999.

drug resistance, plasmids, *Salmonella* 4277.

drug resistance, *Salmonella* isolates, Netherlands, incidence 5161.

drug resistance, *Staphylococcus epidermidis*, *Staphylococcus saprophyticus* 4279.

drug resistance, tetrahydrofolate dehydrogenase genes, *Escherichia coli*, *Klebsiella pneumoniae* 1522.

drug resistance, transfer, urinary tract clinical isolates, Finland 9654.

in vitro antibacterial activity, McCoy cells, *Chlamydia trachomatis* 6008.

Mycobacterium infection, in vitro antibacterial activity 6034.

resistance transfer, plasmids role, *Escherichia coli* 6028.

resistance, synergism, in vitro, antibacterial activity, bacteria drug resistance 6163.

susceptibility, antimicrobial agents, statistical analysis methodology 1795.

Trimethylamine-N-oxide reductase,

Escherichia coli, inhibition, preservatives 269.

purification, characterization, *Salmonella typhimurium* 8263.

1,2,2,3-Trimethylcyclopent-3-en-yl)-propan-2-one,

Acetemonium roseum, conversion 8435.

Trimmatostroma bifarium,

leafspot, *Eucalyptus*, New Zealand 7706.

characterization, association *Eucalyptus* leafspot 5085.

Trimmatostroma excentricum,

leafspot, *Eucalyptus*, New Zealand 7706.

2,4,6-Trinitrotoluene,

transformation, bacteria 2019.

4,18,19-Trinor-3,4-seco-5-oxo-(12Z)-labda-8(17),12,14-trien-3-olc acid,

conversion, *Rhodococcus erythropolis* 8438.

Triostin,

molecular weight 6211.

Triostin A,

binding adenine, guanine, N.M.R. 8030.

Triostins,

antibiotics, antibacterial activity 3424.

Triparanol,

transformation, metabolites, *Lagenidium* 1965.

Triphenyl-phosphonic arylhydrazones,

antibacterial activity 7923.

Triphenylin chloride,

seed treatments, *Oryza sativa*, *Xanthomonas oryzae* infection 2293.

Triphenylin isoselenocyanate 4-picoline,

antifungal activity, *Cucurbitaria lunata* var. *aeria* 7939.

Tri,

+ EDTA, ± antibiotics, antibacterial activity, pathogens, bacteria 7080.

+ EDTA treatment, *Vibrio cholerae* lysis, association nitrofurantoin resistance 7927.

Trisaccharides,

antigen O antigenic determinants, synthesis, *Salmonella*, *Escherichia coli* 2821.

Trisaccharides, *Shiella sonnei* antigen (enterobacterial common), structure 9196.

Trisaccharophorus monosporus,

cellulose decomposition 2903.

Triterpene glycosides,

Holothuroidea, antimicrobial activity, bacteria, fungi 2494.

Tritation,

amnoglycoside antibiotics, methodology 8821.

Tritem,

α-amylase inhibitor, inhibition α-amylase, *Bacillus subtilis* 4629.

brown rust, stripe rust, germplasm screening, field trials, disease resistance development, India 5726.

Cephalosporium gramineum infection, roots, freeze-thawing effects on 376.

crop fields, damage, pests, Aphididae 3001.

cultivation, association, aging microorganisms, mammalian interaction 3943.

disease resistance, powdery mildew, cultural conditions 2250.

disease resistance, *Septoria tritici*, infection 8620.

Erysiphe graminis powdery mildew, treatment, drug resistance 2126.

footrot pathogens antagonism, *Pseudocercospora herpotrichoides*, *Fusarium*, *Rhizoctonia cerealis* 1148.

Gaeumannomyces graminei var. *tritici* take-all, association, soil water 491.

genetic analysis, disease resistance, stripe rust, *Puccinia striiformis* 1344.

Glomerella zeae infection, vomitoxin distribution, 8546.

glume blotch, *Septoria nodorum*, association *Sitodiplosis mosellana* 1187.

infectivity, *Rhizoctonia solani*, *Rhizoctonia cerealis* 9367.

loose smut, *Ustilago tritici*, races, Australia 3941.

mosaic disease, viruses etiology, India 3953.

nitrogen-fixing bacteria activity, acetylene reduction 1497.

plant diseases, *Erysiphe graminis*, *Puccinia hordei*, *Septoria*, disease control, fungicides 5830.

seedlings, *Fusarium culmorum* infection, water potential effects on pathogenicity 1149.

seeds, sterilization, methodology, *Gaeumannomyces* 5846.

Septoria tritici infection, leaves necrosis, yield reduction 9368.

soil properties, effects on rhizosphere microorganisms 7797.

soils (loam), fertilizers (slow release) effects on, nitrification, uptake, yield 621.

stem rust disease resistance, measuring techniques, DNA hybridization 449.

stem rust pathogens, *Puccinia graminis*, disease control, *Barbena vulgaris* eradication, USA 1389.

stem rust, *Puccinia graminis* f.sp. *tritici*, strains, characterization 3944.

straw, biodegradation, soil, *Cephalosporium gramineum*, effects on 8451.

straw, composting, mesophilic fungi colonization 3781.

straw, production, single-cell protein, *Myrothecium verrucaria* 1084.

straw, thermophilic fungi colonization, composting 3780.

vesicular-arbuscular mycorrhizas, effects on drought tolerance 4185.

yield, *Gaeumannomyces graminis* take-all, potassium nutrition, effects on 371.

yield, yellow spot effects on 4956.

Triticum aestivum,

Aphididae, disease transmission, barley yellow dwarf virus 9340.

barley yellow dwarf virus, Aphididae, infection, identification, aerial photography 6762.

benomyl, treatment, footrot, *Pseudocercospora herpotrichoides* 2284.

blotch, *Bacillus megaterium* pv. *cereales* 1152.

Botrytis cinerea infection, defense mechanisms, leaves, lignin induction 1368.

Triticum aestivum, (continued)

brown rust susceptibility, *Puccinia recondita* var. *tritici* 3006.
bunt, *Tilletia* 1196.
bunt, *Tilletia controversa*, disease control, fungicides foliar applications 4111.
calcium nitrate, potassium phosphate, effects on, disease resistance, powdery mildew, *Erysiphe graminis* 378.
Cladosporium infection, *Sitobion avenae* honeydew+barley yellow dwarf virus infection effects on pathogenicity 3934.
cold hardiness, barley yellow dwarf virus infection, effects on 9343.
contamination, *Aspergillus flavus* aflatoxins 3872.
crop rotation, take-all, *Gaeumannomyces graminis* var. *tritici* 2266.
cultivars, disease resistance, plant breeding, leaf rust, *Puccinia recondita* f.sp. *tritici* 1338.
detection, brome mosaic virus, barley stripe mosaic virus, immunodiffusion, enzyme-linked immunosorbent assay 6757.
disease resistance, *Cephalosporium gramineum*, genetic variance 7747.
disease resistance genes, powdery mildew, *Erysiphe graminis* 2256.
disease resistance, leaf rust, genetic control, computer applications, USA, North Dakota 7730.
disease resistance, loose smut, *Ustilago tritici* 8624.
disease resistance, powdery mildew, *Erysiphe graminis* f.sp. *tritici* 2283.
disease resistance, screening, *Erysiphe graminis* f.sp. *tritici* infection 1347.
disease resistance, seasonal variation, *Septoria nodorum* 6781.
disease resistance, seedling blight, *Fusarium graminearum* 4072.
disease resistance, *Septoria nodorum* infection, genetic analysis 4058.
disease resistance, stem rust, *Puccinia graminis* f.sp. *tritici*, genetic analysis 453.
disease tolerance, barley yellow dwarf virus 365.
Erysiphe graminis f.sp. *tritici* powdery mildew, disease resistance inheritance 9464.
eye spot, *Rhizoctonia cerealis*, etiology 2124.
eyespot, *Pseudocercospora* helminthosporoides, rainfall spores dispersal, disease spread 5727.
factors affecting, disease resistance, footrot, *Pseudocercospora* helminthosporoides 4087.
fluorescence detection, seed-borne diseases, *Septoria nodorum* 1190.
fungi infection, plant protection, coatings, waxes, plastics 4071.
fungicides, insecticides, pests control, disease control 2273.
Fusarium culmorum infected, role, *Fusarium culmorum* infected roots, crop residues 4071.
Gaeumannomyces graminis, infection, inoculation, methodology 3949.
genes, disease resistance, *Erysiphe graminis* f.sp. *tritici* infection, cell walls chemical composition association 9476.
genetic analysis, disease resistance, loose smut, *Ustilago* 7744.
genetic factors, disease resistance, rust, *Puccinia graminis* f.sp. *tritici* 3125.
glume blotch, *Septoria nodorum*, latent infection 6752.
glume blotch, *Septoria nodorum*, pathogenicity 3021.
glume blotch, *Septoria nodorum*, symptoms 3950.
grain, contamination, *Tilletia controversa* spores 1329.
grain, cytokinins levels, relationship, disease resistance, mildew, *Erysiphe graminis* 2249.
grain, nutrient uptake, pathogens incidence, factors affecting 5725.
headfly, disease resistance, *Helminthosporium sativum* leafspot 3121.
hormones mutants, relationship, *Azospirillum* inoculation 5944.
host range, *Septoria nodorum*, pathogenicity, spore germination 3019.
inheritance, disease resistance, rusts, *Puccinia tritica* 2255.
leaf rust disease resistance, genetic variance 1161.
leaf rust, *Puccinia recondita*, epidemiology, infectivity 370.
leaf rust, *Puccinia recondita* f.sp. *tritici*, temperature effects on infectivity 3932.
leafspot, *Ascochyta avenae*, pathogenicity, climatic conditions 8549.
leaves, *Puccinia recondita* uredinia growth rate association 6748.
mosaic disease, *Corynebacterium michiganense* subsp. *tesellarius* 4966.
Neovossia indica bunt, relationship bakery products properties 5708.
Neovossia indica bunt, screening methodology 6350.
nitrogen, agricultural practices, effects on, incidence, bunt, *Neovossia indica* 1159.
nitrogen nutrition, role, *Azospirillum brasilense* biomass 7011.
nitrogen nutrition, role, nitrogen-fixing bacteria, rhizosphere microorganisms 7005.
plant breeding, disease resistance, barley yellow dwarf virus 445.
plant breeding, disease resistance, glume blotch, *Septoria nodorum* 3123.
plant breeding, disease resistance, stem rust 447.
plant breeding, disease resistance, stem rust, *Puccinia graminis* f.sp. *tritici* 8603.
plant breeding, height, disease resistance, leaf blotch, *Septoria tritica* 454.
powdery mildew, disease control, triadimenol 1422.
powdery mildew, *Erysiphe graminis* f.sp. *tritici*, virulence, mutants, genetic analysis 356.
proteins metabolism, role disease resistance, stem rust, *Puccinia graminis* f.sp. *tritici* 4075.
Pyrenophora tritici-repentis spot, incidence, Colombia, Ecuador, Peru 9356.
resistance breeding, *Neovossia indica* bunt 1159.
rhizoplane, *Azotobacter chroococcum* growth 3195.
rhizosphere, nitrogen fixation, *Bacillus polymyxa*, *Azospirillum brasilense*, nitrogen-15 dilution 9587.
rhizosphere, phosphate-dissolving bacteria, growth, inhibition, 2,4-D, 2,4-dichlorophenoxy-1,2-nitrophenyl ether, 5-methyl(2,4-dichlorophenoxy)-2-nitrobenzoate 4252.
root rot, fallow land effects on 379.
root rot, fungi identification, USA, Colorado, USA, Wyoming 6776.
root exudates, effects on nitrogen fixation, rhizosphere microorganisms 4237.
roots, *Gaeumannomyces graminis* infection, bacteria antagonism, clays effects on 3008.
rust, fungicides treatment, association grain quality 7667.
rust, interaction, barley yellow dwarf virus, *Puccinia recondita* f.sp. *tritici*, pathology 344.
scab, *Fusarium graminearum*, USA, Washington 6771.
seed treatments, disease control, loose smut, *Ustilago* 1431.
seed treatments, relationship calcium peroxide antimicrobial activity 7773.
seed treatments, use, phenylmercuric acetate, effects on *Fusarium nivale* infection 8645.
seed-borne diseases, fungicides disease control 1434.
seedlings, pathology, seed-borne diseases, *Fusarium nivale* 3937.
seedlings, root rot, *Fusarium graminearum*, nitratrium disease control 4109.
seeds, fungi infection, relationship germination 8600.

Triticum aestivum, (continued)

seeds germination, *Azotobacter chroococcum* stimulation 3194.
Septoria infection, yield 9369.
Septoria nodorum glume blotch, disease control, crop rotation, seed treatments 9466.
Septoria speckled leaf blotch, incidence, distribution, USA, California 1171.
snow mold 1194.
soil-borne diseases, wheat mosaic virus vectors, *Polymyxa graminis* ultrastructure 363.
sprays, disease control, *Puccinia striiformis*, stripe rust 5722.
statistical analysis, epidemiology, stripe rust, *Puccinia striiformis* 2125.
stem rust disease resistance, genetic control 7731.
stem rust, disease resistance, Hungary 7735.
stem rust disease resistance, inheritance, genetic analysis 1348.
stem rust, *Puccinia graminis* f.sp. *tritici*, pathogenesis 9351.
stem rust, *Puccinia graminis* f.sp. *tritici*, photosynthesis inhibitors effects on 3948.
stem rust, *Puccinia graminis* f.sp. *tritici* races, overwintering, USA, Texas, Mexico 4961.
stem rust, *Puccinia graminis* f.sp. *tritici*, virulence gene frequency 5041.
stem rust, virulence, *Puccinia graminis* f.sp. *tritici* races 4958.
straw decomposition, respiration, C/N ratios, soil microorganisms 6966.
straw, degradation, *Trichoderma reesei* cellulase, cultivars effects on 8415.
straw, *Pleurout ostreatus*+*Erwinia carotovora*, culture, effects on, nutritive value, *Ruminantia* 254.
stripe, *Cephalosporium gramineum*, incidence, agricultural practices 4960.
structure relationship, *Puccinia graminis* f.sp. *tritici* rust 351.
take-all, ammonium fertilizer applications effects on 1331.
take-all, *Gaeumannomyces graminis*, disease control, *Pseudomonas* seed treatments 3158.
take-all, *Gaeumannomyces graminis*, disease control, use, *Pseudomonas* 4090.
take-all, *Gaeumannomyces graminis* var. *tritici*, disease control, benomyl, carbendazim 507.
take-all, *Gaeumannomyces graminis* var. *tritici*, incidence, agricultural practices effects on 9361.
take-all, *Gaeumannomyces graminis* var. *tritici*, pathogenicity, soil pH effects on 3013.
take-all, *Gaeumannomyces graminis* var. *tritici*, triadimenol seed treatments 5067.
take-all, *Gaeumannomyces graminis* var. *tritici*, virulence 2137.
take-all, soil microorganisms, amoeba, phagocytosis, fungi 4223.
tillage, crop residues burning, vertical distribution, *Cochliobolus sativus* 9358.
Tilletia controversa bunt, disease control, fungicides seed treatments 4110.
uptake, nitrogen sources, crop residues, decomposition, soil microorganisms 7001.
urea folia application, effects on rhizosphere microorganisms, respiration 7820.
Ustilago tritici infection, factors affecting 380.
virulence system, disease spread, barley yellow dwarf virus 9342.
wheat mosaic virus infection, cytology 2117.
wheat mosaic virus infection, disease resistance, genetic analysis 2240.
wheat mosaic virus infection, soil fumigation effects on 9499.
wheat spindle streak mosaic virus infection, detection, immunoelectron microscopy 9353.
wheat streak mosaic virus infection, association, protein composition 6779.
yellow spot, *Pyrenophora tritici-repentis*, epidemiology, yield 8547.
yield, *Azospirillum brasilense* inoculation rhizosphere, nitrogen fixation 9602.
yield, fungi root rot, factors affecting 1179.
yield, inoculation, *Azospirillum*, nitrogen fixation 9599.
yield, relationship, *Azospirillum* inoculation 5942.
yield, speckled leaf blotch, disease control, models 7671.
yield, stripe rust, *Puccinia striiformis* 1165.

Triticum turgidum,
disease resistance, stem rust, genetic control 7728.
yield, inoculation, *Azospirillum*, nitrogen fixation 9599.

Tritium,
uptake, association, biological activity, soil, USA 3209.
+EDTA+EDTA, antibacterial activity, *Escherichia coli* 8765.

Trophic relations,
nutrient dynamics, forests, steppes 1448.

Tropical environment,
drinking water contamination, coliforms identification characterization 8978.
forests, leaf litter decomposition, population levels, soil microorganisms 5855.
forests, leaf litter, fungi, species composition, population levels 1443.
fungi biodegradation, products 2034.
grasslands, respiration, soil properties, seasonal variations 561.
leaf litter decomposition, forests, Guyana 8447.
organic matter decomposition, soil microorganisms 4186.
plant diseases, geminiviruses 4921.
plants, *Azospirillum* rhizosphere microorganisms, identification, incidence 7853.
respiration, soil properties, diurnal variations 1493.
soil, incidence, sulfate-reducing bacteria 3178.
soil microorganisms, effects on, plants, yield, books 8181.
soil microorganisms, population levels, biomass, biological activity 7824.
storage, *Bacillus thuringiensis*, biological control, larvae, *Simulium damnosum* 6610.

Phaseolus vulgaris disease resistance, *Xanthomonas campestris* pv. *phaseoli* blight 5052.

Trypan blue,
inhibition, measles virus, herpes simplex virus, infection, tissue culture 7110.

Trypanosoma cruzi,
trypanosomids, morphology, infectivity, Vero cells, proteins biosynthesis 1824.

Trypanosoma cruzi, morphology, infectivity, Vero cells, proteins biosynthesis 1824.

Tryporyza nivella,
biological control, Bactospeine 1042.

Trypsin,
antibacterial activity, Chlamydia 9714.
assays, 4-methylumbelliferyl esters substrate specificity analysis 5504.

Trypsin-like enzyme,
Streptomyces erythraeus, interaction ovumucoid, *Coturnix japonica* 6481.

- Tryptone**, heat treatments, antibacterial agents production 8777.
- Tryptophan**, catabolism, *Rhizobium japonicum* mutants, biosynthesis, indole-3-acetic acid, indolepyruvic acid 8198.
- effects on *Fusarium moniliforme* nicotinic acid biosynthesis 1841.
- nutrient requirements, mucidin biosynthesis, *Oudemansella mucida* 8015.
- production, growth conditions, *Achromobacter liquidum* 8203.
- residues, histidine decarboxylase, N-bromosuccinimide chemical modification, *Micrococcus* 24.
- residues, ribonuclease, conformational analysis, *Bacillus intermedius* 2768.
- L-Tryptophan**, *Escherichia coli*, production 9160.
- production, *Escherichia coli* immobilized cells 9126.
- Tryptophan deaminase**, detection, identification, Enterobacteriaceae 6311.
- Tryptophan synthase**, conformation, ligands binding effects on, *Escherichia coli* 6485.
- Escherichia coli*, use, L-selenocysteine enzymatic synthesis 9127.
- pyridoxal 5'-phosphate binding, N.M.R., *Escherichia coli* 4628.
- quaternary structure, fluorescence, hydrodynamics, *Escherichia coli* 1871.
- α -subunit unfolding, urea induction, absorption spectroscopy, *Escherichia coli* 4590.
- X-ray scattering, *Escherichia coli* 1865.
- Tryptophanase**, overproduction, *Escherichia coli* mutants 9137.
- Tryptophanyl-tRNA synthetase**, purification, *Bacillus stearothermophilus* 933.
- Tsuga heterophylla**, ectomycorrhizas symbiosis, relationship, survival, association, wood decay, minerals soil 3164.
- forests, wood decay, C/N ratios 527.
- growth, mycorrhizas, soil properties effects on 520.
- Laccaria laccata*, effects on, growth, Coniferaleae 532.
- leaf litter decomposition, fertilizer applications effects on, forest floor 6897.
- mycorrhizas, biodegradation, wood, use, inoculum 529.
- seedlings, *Cenococcum geophilum* mycorrhizas formation, USA, Oregon 6912.
- seedlings, plant diseases, *Colletotrichum acutatum*, new records, Canada 7763.
- Tuber**, *Pirus radiata*, *Pseudotsuga menziesii*, New Zealand 7774.
- Tuber melanosporum**, fruit bodies production, fertilization, irrigation, *Quercus lanuginosa* 6899.
- Tuberaceae**, ectomycorrhizas symbiosis, incidence 4210.
- Tuberculin**, activity, association *Mycobacterium tuberculosis* proteins, biosynthesis, characterization 6364.
- Tuberculosis**, *Mycobacterium*, clinical isolates, antibiotic resistance, antitubercular agents 8747.
- mycobacterium*, identification methodology 3607.
- treatment, association, ethambutol analogs antibacterial activity, *Mycobacterium* 5168.
- Tuberculoatearic acid**, detection, *Mycobacterium* identification 6326.
- Tubers**, metalaxyl accumulation, antifungal activity, *Phytophthora infestans*, *Solanum tuberosum* 9495.
- potato virus M levels, *Solanum tuberosum* 7693.
- soft rot, *Solanum tuberosum* 5752.
- Solanum tuberosum*, hypersensitive response, sesquiterpenoids, alkaloids, *Phytophthora infestans* 3089.
- Solanum tuberosum*, incidence, potato virus Y, potato leaf roll virus, USA 1245.
- Solanum tuberosum*, infection, potato mop-top virus 2173.
- Solanum tuberosum*, isoprenoids isolation, *Phoma exigua* var. *foveata* infection 3971.
- Solanum tuberosum*, phytoalexins induction, arachidonic acid, infection, *Phytophthora infestans* 428.
- Solanum tuberosum*, potato leaf roll virus detection, enzyme-linked immunosorbent assay 9404.
- Solanum tuberosum*, sesquiterpenes induction, alternaric acid, *Alternaria solani* 505.
- Solanum tuberosum*, soft rot, *Erwinia* 6809.
- Solanum tuberosum*, tobacco rattle virus, detection, enzyme-linked immunosorbent assay, hybridization analysis 6808.
- Solanum tuberosum*, ultrastructure, *Phytophthora infestans* mycelia lipoglycoproteins effects on 2257.
- Tubular flow systems**, fouling organisms, films, quantitation 5316.
- Tularaemia**, diagnosis, *Dermacentor marginatus* tissues fixation, disinfection 1774.
- Tulip breaking virus**, virions morphology, transmission (mechanical), *Lilium longiflorum*, *Chenopodium* 7707.
- Tulipes**, bulbs, *Rhizoctonia solani* survival, storage conditions effects on 3973.
- Tumor cells**, α -interferon antiviral activity 7946.
- Tumors**, Kanchchoe, induction, *Agrobacterium tumefaciens*, osmotic pressure effects on 4029.
- Nicotiana tabacum*, *Agrobacterium tumefaciens* crown gall, morphology, genetic control 7689.
- plants, molecules structure, books 8173.
- thymidylate synthase, inhibition, *Saccharopolyspora hirsuta* vanoxonin 7449.
- Tundra**, peat, freeze-thawing effects on soil microorganisms 580.
- soil, human impact, motor vehicles, arylsulfatase activity, soil moisture, USA, Alaska 6951.
- soil microorganisms, respiration, remote sensing, soil properties 5885.
- soil properties, enzymatic activity 5884.
- sub-alpine environments, mycorrhizas, biomass 5883.
- Tungro virus**, disease control, host plants, pest resistance, genes, *Nephotettix virescens*, *Oryza sativa* 5548.
- disease resistance, *Oryza sativa* 5812.
- Tungsten**, containing formate dehydrogenase (NADP⁺), purification, activity, C.D., E.S.R., absorption spectroscopy, *Clostridium thermoautotacticum* 8280.
- Tunicamycin**, effects on, herpes simplex virus 1, glycoproteins, biosynthesis 4312.
- effects on, rotavirus (simian) SA11, glycoproteins, role, infectivity, morphogenesis 4313.
- polysialination, interferon antiviral activity 9690.
- Turimycin**, biosynthesis, *Streptomyces hygroscopicus*, continuous culture, genetic analysis 762.
- Turbidity**, *Escherichia coli* cell suspensions, β -adrenergic blocking agents effects on 2442.
- polyethylene glycol, detection hepatitis B surface antigen antigen-antibody complexes 826.
- Turkgrass**, Gramineae, blight, *Pythium*, pathology 5714.
- Turimycin**, fermentation, regulation, hydrolase, phosphate, release 8038.
- fermentation, regulation, 3',5'-cyclic-nucleotide phosphodiesterase, phosphatase 8037.
- production, phosphate requirements, *Streptomyces hygroscopicus* 3439.
- Turkey**, *Helianthus annuus*, *Septonia helianthi* leafspot, incidence, identification 9438.
- Turkeys**, *Campylobacter fetus* subsp. *jejuni*, contamination 4787.
- intestinal isolates, media (isolation) methodology 8135.
- Salmonella* contamination, abattoirs 2050.
- Turnip mosaic virus**, *Carthamus tinctoria* 1295.
- cytology, immunodiagnosis, Brassica oleracea var. *acephala* 4983.
- effects on, yield, *Rheum raphaniticum* 2198.
- host range 2179.
- infection, cytology, *Nicotiana glutinosa* 2164.
- infection, *Impatiens balsamina*, pathogenesis 3079.
- susceptibility, Brassica 2186.
- Turnip yellow mosaic virus**, infected protoplasts, identification, autoradiography 8094.
- infection, *Cruciferae* 3082.
- Tuvalu**, oral hygiene, association, periodontal diseases, dental caries, man 8078.
- Tween**, +polyvinylpyrrolidone media (culture), *Leptospira interrogans* growth 9031.
- Tween 80**, hydrolysis, *mycobacterium* esterase, purification, physicochemical properties 8259.
- role, ethanol tolerance enhancement, *Saccharomyces*, sake fermentation 9244.
- Tylosin**, biosynthesis pathway, *Streptomyces fradiae* 3434.
- biosynthesis, relationship, cyclic AMP, growth, *Streptomyces fradiae*, mutants 4398.
- biosynthesis, *Streptomyces fradiae* 6196.
- effects on gram-positive bacteria macrolide antibiotics resistance, pigs isolates 5156.
- macrolide antibiotics structure, *Streptomyces fradiae* biosynthesis 6212.
- production, batch culture, glucose, monosodium glutamate, stimulation, *Streptomyces fradiae* 4425.
- production, streptomycetes, mycelia, immobilized cells 1685.
- structure-activity relationships, antibacterial activity 3377.
- Typha angustata**, nitrogen fixation assays, India 7651.
- Typhoid fever**, association, *Salmonella typhi* feces isolates, antigens detection, use, agglutination 841.
- Typha incarnata**, foot rot, antifungal activity, peracetic acid, Gramineae 1394.
- Typing**, herpes simplex virus, methodology, drug sensitivity testing association thymidine kinase activity 1741.
- Proteocaine sensitivity, Proteus clinical isolates, association, antibiotic resistance 3264.
- Tyrodine A**, antibacterial activity, *Bacillus brevis*, *Bacillus subtilis* 2424.
- Tyrosine**, biodegradation, *Lactobacillus plantarum* 7549.
- biosynthesis, *Pseudomonas*, 4-chlorobenzoic acid media 7308.
- measurements, use *Aeromonas phenicococcus* electrodes 6303.
- +norleucine, media (culture) identification, *Clostridium difficile* 9907.
- residues, iodination, ribosomes, ribosomal subunit 50S, *Escherichia coli* 7289.
- Tyrosine aminotransferase**, purification, characterization, *Trichoderma viride* 947.
- Tyrosine ammonia-lyase**, levels, *Oryza sativa* leaf blight 384.
- Tyrosine decarboxylase**, *Streptococcus faecalis*, assays, spectrophotometry 7345.
- Tyrosyl-tRNA synthetase**, amino acid sequence, *Bacillus stearothermophilus* 6532.
- U.V. Radiation**, bacteriocins biosynthesis induction, *Erwinia* 760.
- disinfection, *Bacillus subtilis* contamination waste water 3472.
- effects on hypersensitive response, tobacco mosaic virus, *Phaseolus vulgaris* 3111.
- inactivation, nuclear polyhedrosis virus, effects on infectivity, *Lymantria dispar* 2487.
- protection virulence, nuclear polyhedrosis virus, pest control, biological control, *Lymantria dispar* 7475.
- radioresistance, *Aureobasidium pullulans*, ploidy effects on 2395.
- resistance, R factors, plasmid pBS12, plasmid pBS31, *Pseudomonas aeruginosa* 7037.
- treatment, bacteria food contamination, fishery products 4849.
- +treatment pools, microflora, incidence, Naegeleia, hospitals 798.
- water sterilization, effects on bacteria 4325.

U.V. Spectroscopy,

albomycin 81, albomycin 82, albomycin c structure, *Streptomyces* 2573.
proteinase inhibitor, *Streptomyces nigrescens* 7306.

Ubiquinol-cytochrome c reductase,

cytochrome b, isolation, characterization, *Rhodospseudomonas sphaeroides* 4564.
cytochrome b, physicochemical properties, *Rhodospseudomonas sphaeroides* 4692.
isolation, characterization, electron microscopy, *Neurospora* 6486.

Ubiquinone,

glucose dehydrogenase reduction, cytoplasmic membranes, *Pseudomonas fluorescens* 955.

Ubiquinone-10,

Paracoccus denitrificans, production, anaerobic conditions 5551.

Udder,

cattle, microflora, sanitation, milk contamination 5339
hygiene, relationship *Streptococcus*, *Staphylococcus*, mastitis cattle 4453.
infectious disease, cattle, association, environmental conditions 6272.
microflora, milk contamination, cattle 4820.
preparation, cattle, relationship, bacteria milk contamination 4798.

Udder hygiene,

mastitis, cattle 9819.
mastitis prophylaxis, cattle 9820.

leaf dips, in vitro susceptibility, *Staphylococcus aureus* 6038.

UDP-N-acetyl glucosamine 1-carboxy vinyl transferase,

inactivation, fosfomycin, antibacterial activity, *Escherichia coli* 8043.

UDP-N-methyl-D-glucosamine phosphate,

intermediates, streptomycin biosynthesis, *Streptomyces gneuseus* 3412.

UDPacetylglucosamine pyrophosphatase,

assays, *Candida albicans* 58.

UDPacetylglucosamine 2-epimerase,

purification, characterization, *Escherichia coli* 6448.

UDPacetylmanosamine dehydrogenase,

purification, characterization, *Escherichia coli* 6450.

UDGalactose,

production, *Torulopsis candida*, radioactive labelling 6575.

UDGalactose 4-epimerase,

deficient mutant, *Salmonella anatum*, antigen O polysaccharides biosynthesis,
synthetic galactosyl ficaprenyl diphosphate intermediates 7440.

UDGlucose,

production, *Torulopsis candida*, radioactive labelling 6575.

UDGlucose 4-epimerase,

1-sulfinic-8-naphthalenesulfonic acid interaction, fluorescence, *Saccharomyces fragilis* 5494.

purification, characterization, *Saccharomyces cerevisiae* 4655.

Uganda,

Poaceae rust, incidence 9365.

Ulceracin,

Corynebacterium ulcerans, purification, characterization, antibacterial activity 8026.

Ulcers,

cornea, treatment, man, relationship anesthetics antibacterial activity 9676.

Uleine,

transformation, *Streptomyces purpureus*, *Streptomyces rimosus*, *Penicillium adametzii*, *Penicillium chrysogenum* 7485.

Ulmus,

Ceratocystis ulmi phytotoxins detection, use, fluorescent antibody test 4167.

Dutch elm disease, bacteriological control, *Trichoderma viride* 6613.

Dutch elm disease, Ceratocystis ulmi 4145.

Dutch elm disease, Ceratocystis ulmi, environmental impact, Aves, population changes 6927.

exudates, yeasts isolation, identification, host specificity, population dynamics 2295.

sensitivity, *Ophiostoma ulmi*, relationship, Dutch elm disease distribution, Belgium 5080.

yellow, mycoplasma-like organisms, effects on stomata 3171.

Ulmus americana,

annual rings, isolation, Ceratocystis ulmi, USA, Florida 2310.

Ceratocystis ulmi, Dutch elm disease, defects 4152.

Ceratocystis ulmi Dutch elm disease, prophylaxis, benzimidazole derivatives 1458.

Ceratocystis ulmi, pathogenicity 5871.

wetwood, bacteria, gas production 2323.

wetwood etiology, bacteria species 8657.

xylem, dysfunction, Dutch elm disease, Ceratocystis ulmi 8640.

Ulmus glabra,

Dutch elm disease, microorganisms, Scolytus vectors 1453.

Ulmus parvifolia,

Ceratocystis ulmi, pathogenicity 5871.

Ulmus pumila,

Botryodiplodia hypodermia infection, virulence 2320.

Ulocladum chartarum,

fruit rot, *Cucumis*, extracellular enzymes effects on pathogenesis 4015.

Ultracentrifugation,

cytochrome c' subunit association, *Rhodospirillum rubrum* 7296.

fatty-acid synthetase, quaternary structure, *Brevibacterium ammoniagenes* 2763.

preparation, vaccines, *Pseudomonas aeruginosa* 3456.

purification, plasmids 3553.

Ultrafiltration,

bacteria, milk, inorganic compounds membranes 4762.

preparation, bacteria, hygiene, milk products 4791.

separation techniques, *Pseudomonas aeruginosa* 3456.

separation techniques, bacteria enzymes 9167.

Ultrahigh temperature,

pasteurization, milk, limulus lysate test, detection, bacteria 201.

Ultrasound,

separation bacteria, films, counting methods, activated sludge 8933.

UMP,

+hexose, fermentation, *Torulopsis candida*, UDPglucose production, UDPgalactose

production, radioactive labelling 6575.

Uncinula necator,

powdery mildew, Botrytis cinerea, propiconazole effects on 4102.

powdery mildew disease control, greenhouses plants, ectaconazole treatment 5004.

powdery mildew, Vitis vinifera buds, overwintering 1270.

powdery mildew, Vitis vinifera, *Cucumis sativus*, Triticum, disease resistance,

cultural conditions 2250.

Undecanoic acid,

antifungal activity, phospholipids metabolism, *Trichophyton rubrum* 7931.

drug resistance, *Trichophyton rubrum* resistant mutant, triacylglycerol lipase,

Undecanoic acid, (continued)

keratinase, phospholipase A, levels 7877.

Undecaprenyl pyrophosphate synthetase,

purification, characterization, *Bacillus subtilis* 1916.

Undecylenenilide,

derivatives, antibacterial activity 9665.

Undecylenic acid,

emulsions, antifungal activity 7932.

Undergrowth,

Pteridium aquilinum, *Abies concolor*, *Pseudotsuga menziesii*, detection,

ectomycorrhizas association 4191.

Understory,

Myrica cerifera, nitrogen fixation, *Pinus elliptica*, plantations 5853.

Ungulularia,

decomposition, leaf litter, *Abies alba* 2301.

Uracil,

biodegradation, soil 5890.

production, *Candida* 5537.

Uracil phosphoribosyltransferase,

Acholeplasma laidlawii, purification, characterization 9141.

Uranium,

adsorption, *Rhizopus arrizus*, chitin effects on 8714.

bioaccumulation, *Streptomyces viridochromogenes*, immobilized cells, sea water 4258.

emulsion binding, kinetics, *Acinetobacter* 7863.

leaching, phosphorites, heterotrophic microorganisms 3255.

mobilization, rocks, mycelia growth, *Aspergillus*, *penicillium* 7014.

Penicillium, microbiology, biomass, pH 8969.

solubilization, *Thiobacillus ferrooxidans* 7864.

solution, removal, *Penicillium digitatum* mycelia biomass use 9628.

Urate oxidase,

cyanide inhibition, mechanisms, *Candida utilis* 945.

Urban environments,

composting solid wastes, biological activity effects on microflora evolution 8942.

Urbanization,

sewage treatment, effects on, antibiotic resistance, coliforms 7879.

Urbane leaf crinkle virus,

histopathology, *Vigna mungo* 6735.

infection, *Vigna radiata*, benomyl effects on disease transmission 3152.

Urea,

detection, electrodes, nitrifying bacteria, immobilized cells 1804.

disease control, *Venturia pinna*, scab, *Pyrus communis* 1395.

effects on, bacteria growth, crop residues digestion, forage quality 4860.

effects on *Clostridium botulinum* neurotoxins activity 5861.

effects on subtilisin conformation, C.D., fluorescence, kinetics, *Bacillus subtilis* 89.

fertilizer applications, nitrogen sources, soil microorganisms, nitrification 5938.

folia application, effects on rhizosphere microorganisms, respiration, *Triticum aestivum* 7820.

foliar applications, effects on rhizosphere microorganisms, *Zea mays* 5932.

hydrolysis, soil microorganisms, aerobic conditions, anaerobic conditions 5109.

induction tryptophan synthase α -subunit unfolding, absorption spectroscopy,

Escherichia coli 4590.

Limulus lysate test, effects on endotoxins assays 8513.

soil amendment, nitrogen fixation, *Trifolium repens*, pasture 3240.

Ureaplasma,

limonocycin media (selective) 7233.

Ureaplasma urealyticum,

antibodies, detection, enzyme-linked immunosorbent assay 9871.

immunoglobulin G, immunoglobulin M, immunofluorescence detection, serum, man 9932.

killing, media (culture) antisera 833.

rosaramicin, antibacterial activity, antibiotic resistance 2397.

Urease,

activity, soil 616.

biosynthesis, *Staphylococcus saprophyticus*, isolation 7339.

detection, identification, Enterobacteriaceae 6311.

positive bacteria, antibiotic sensitivity testing, neomycin, ampicillin 751.

soil microorganisms, kinetics 2343.

Uredinales,

competition, evolution 6764.

Uredinia,

Puccinia recondita, growth rate, association, *Triticum aestivum* leaves 6748.

Urediniospores,

Puccinia arachidis inoculation, *Arachis hypogaea*, host plants genotypes effects

on 5683.

Uredo kabeleensis,

Poaceae, Africa, East 9365.

Uredo spinulosa sp.nov,

taxonomy, rust, host range, *Discorea* 4013.

Uredo sporobol-pyramidalis,

Poaceae, Africa, East 9365.

Uredines,

Glycine max nitrogen fixation 2365.

Uredoocenic acid dihydrazide,

effects on *Pseudomonas pseudomallei*, *Salmonella typhimurium*, enzymes, infectivity

6056.

Uridine phosphorylase,

Acholeplasma laidlawii, purification, characterization 9142.

purification, *Escherichia coli* 9164.

Urinary tract,

bacteria isolates, antibiotic sensitivity testing, antibiotic resistance 4287.

bacteria isolates, antimicrobial agents activity 8767.

bacteria nosocomial infection, incidence, man, environmental hygiene 8074.

clinical isolates, drug resistance, trimethoprim, transfer, *Banfield* 9654.

clinical isolates, drug sensitivity testing, bactericidal 6114.

clinical isolates, nalidixic acid resistance, roxacin antibacterial activity

5195.

Escherichia coli clinical isolates, antibiotic resistance 7034.

isolates, bacteria, antibiotics sensitivity 8813.

isolates, Enterobacteriaceae identification, methodology 9032.

isolates, Enterobacteriaceae, trimethoprim, drug resistance, British Isles 6007.

pigs, animal isolates, bacteria, chemotherapeutics, drug sensitivity testing

2464.

Urinary tract infection,

- clinical isolates, antibiotic resistance 2418.
 dibekacin treatment, man, antibacterial activity 6187.
Escherichia coli, Klebsiella, detection, gas chromatography methodology 9929.
 gram-negative bacteria, cinoxacin treatment, man, antibacterial activity, reviews 8762.
 Rofloxacine treatment, man 2430.

Urine,

- albumin, enzyme immunoassay, solid phase methods, *Staphylococcus aureus* protein A 5397.
 antimicrobial agents, bioassays, *Bacillus subtilis* spores 9708.
 aztreonam assays, high-pressure liquid chromatography 7167.
 bacteria, bacteriuria detection, dipslide test 9965
 bacteria, culture methodology 5367.
 bacteria, preservation methodology 3618.
 man, aflatoxins detection methodology 1100.
 media (transport) effects on bacteria 9909.
 microscopy, detection, bacteriuria, man 2695.
 screening, bacteriuria, counting methods, man 9945.
 soil amendment, nitrogen fixation, Trifolium repens, pasture 3240.
 soil nitrogen balance, denitrifying bacteria, effects on 2371.
Staphylococcus saprophyticus, media (isolation) 9351.

Uromyces appendiculatus,

- infestation, seasonal variations, chemical control, effects on crop production,
Macrophilum atropurpureum, Australia 6589.
 rust, interspecific relationships, *Verticillium lecanii*, population dynamics,
Phaseolus vulgaris 2108.
 rust, *Vigna sinensis*, Oman, new records 7661.

Uromyces appendiculatus var. appendiculatus,

- rust, *Phaseolus vulgaris*, chlorothallosis disease control 9491.

Uromyces hyparrheniae,

- Poaceae, Africa, East 9365.

Uromyces phaseoli,

- infection, phytoalexins induction, defense mechanisms, *Phaseolus vulgaris* 1352.
 inoculation methodology, *Phaseolus vulgaris* 5685.
 rust, *Phaseolus vulgaris*, biological control, *Bacillus subtilis* 9498.

Uromyces ruminis,

- infection, *Emex australis*, pathogenesis, effects on dispersal 425.

Uromyces striatus,

- rust, *Medicago sativa*, Egypt 5670.

Uromyces transversalis,

- rust, *Gladiolus*, Brazil, new records 2203.

Uromyces viciae-fabae,

- infection, *Vicia faba*, cytology, scanning electron microscopy 5695.
 rust, disease resistance, inheritance, *Vicia faba* 2253.

Uronic acid,

- bioassays, association cell membranes polysaccharides, microorganisms 5365.

Uropyngophora,

- Rhodospseudomonas sphaeroides*, biosynthesis, enzymes systems 9206.

Ursodeoxycholic acid,

- biosynthesis, *Fusarium equiseti*, lithocholic acid metabolism 1825.

USA,

- Aphididae, disease transmission, *Solanum tuberosum*, potato virus Y, potato virus X, potato virus S, potato leaf roll virus 6814.
 bacteria, antibiotic resistance, aminoglycoside antibiotics, clinical aspects, dosage frequency effects on 6002.
Barberis vulgaris eradication, disease control, Triticum stem rust pathogens 1389.
 clubroot, association, lasmodiophora brassicae races detection 3977.
 crop rotation, fertilization, association, catalase activity, soil 2362.
 food, cadmium, *Clodium perfringens* toxins, man 2958.
 Glycine max, *Phialophora gregata* isolates, pathogenicity 4932.
 Lycopersicon esculentum, Alternaria solani early blight, computer applications predictions 4011.
 mines, forest products, Basidiomycetes biodegradation 7792.
 mushrooms cultivation, technology, species use, reviews 4825.
 osmium, food contamination, aflatoxins, weather effects on 6672.
Phaseolus vulgaris, bean common mosaic virus infection, epidemiology 5690.
 Pinus monticola, blister rust, disease resistance 8618.
 Pyricularia oryzae blast, Oryza sativa disease resistance 5711.
 Sclerotinia sclerotiorum white mold, *Phaseolus* 4940.
 soil, tritium uptake, association, biologically active 3209.
Solanum tuberosum tubers, incidence, potato virus Y, potato leaf roll virus 1245.
 Zea mays, pathogenicity, *Stenocarpella macrospora*, comparison, *Stenocarpella maydis* 6780.

USA, Alaska,

- lakes, Carex plant debris, biodegradation, nutrient enrichment effects on 2023.
 nitrogen cycle 7849.

USA, Arizona,

- crop lands irrigation, Pythium aphanidermatum inoculum density, Beta vulgaris 426.

USA, Arkansas,

- Iris germanica, leafspot, incidence, Heterosporium iridis 4988.
 new records, *Vaccinium corymbosum*, soil rot, Phytophthora 1263.

USA, California,

- Trifolium repens, *Phaseolus vulgaris*, peanut stunt virus isolation 1127.
 Arbutus menziesii, Arctostaphylos manzanita, mycorrhizas symbiosis 4196.
 clubroot, association, lasmodiophora brassicae races detection 3977.
 kiwifruit post-harvest decay, fungi contamination 5031.
 montane environments, mudflows, soil organic matter accretion, nutrient cycles, biological activity 9566.
 Pierce's disease bacteria incidence, plants, vectors 8531.
 Populus speckled leaf blotch, Triticum aestivum, incidence, distribution 1171.
 Urtica americana, annual rings, infection, Ceratocystis ulmi 2310.
 Vitis vinifera, fruits, Botrytis cinerea rot, agricultural practices effects on pathogenicity 7685.

USA, Colorado,

- root rot, Triticum aestivum, fungi identification 6776.
 streams, water quality, surface water, environmental impact, grazing, cattle 8973.

USA, Delaware,

- Micropshpha diffusa*, powdery mildew, Glycine max 4934.

USA, Florida,

- Cajanus cajan, mycoplasma-like organisms witches' broom incidence, association, rabdovirus infection 4945.

USA, Florida, (continued)

- Carica papaya, viruses incidence, distribution 5020.
Citrus latifolia plant diseases, melanose, greasy spot, epidemiology, Diaporthe citri, *Mycosphaerella citri* 9376.
 lettuce mosaic virus detection, Lactuca sativa seeds, enzyme-linked immunosorbent assay 5017.
Pseudomonas cichorii necrosis outbreaks, *Chrysanthemum morifolium* stems 5023.
Pseudomonas corrugata necrosis incidence, *Lycopersicon esculentum* stems 5025.
Psophocarpus tetragonolobus, cucumber mosaic virus isolation, characterization 1125.
Vaccinium ashei, symbiosis, *Elaphomyces persoonii*, factors affecting 4192.

USA, Georgia,

- Carya illinoensis, crown gall, Agrobacterium, pathogens characterization, biological control, use, Agrobacterium radiobacter 3971.

USA, Hawaii,

- Brassica actinophylla seedling blight, Pythium splendens, etiology, disease control 4396.

USA, Idaho,

- Kuehneola uredinis leaf rust, Rubus, weed control, biological control 9410.
 pasture soil, *Pythium splendens* suppression, germination, growth 9551.

USA, Illinois,

- Cronartium coleosporioides, blister rust, relationship habitat, surveys, Pinus contorta 5862.

USA, Indiana,

- forests, floodplains, nutrient dynamics litter fall decomposition 6890.
 Glycine max diseases identification, computer applications 4942.

USA, Iowa,

- Gramineae, barley yellow dwarf virus disease reservoirs 1158.
 Zea mays, Puccinia polysora rust, incidence, relationship, weather 6765.

USA, Kentucky,

- Populus, endomycorrhizas association, incidence 5851.

USA, Louisiana,

- weather, relationship, Phomopsis infection, Glycine max seeds 6734.

USA, Maine,

- Larix laricina, Lachnella wilkommii canker 5876.

USA, Maryland,

- soil nitrate reduction, association, tillage, crop production (no-tillage) 5950.

USA, Massachusetts,

- isolation, Gigaspora reticulata sp.nov., characterization 4187.

USA, Michigan,

- benomyl, use, disease control, diback, Vitis vinifera 6881.

USA, Minnesota,

- Elaeagnus angustifolia, Phomopsis elaeagni canker, incidence 9522.
 Verticillidiella procer, decline, Pinus strobus, Pinus resinosa, Pinus nigra 5077.

USA, Mississippi,

- Gramineae, infection susceptibility, maize dwarf mosaic virus, sugarcane mosaic virus 8559.

USA, Missouri,

- Saccharum, rust, overwintering 3016.

USA, New Jersey,

- Festuca arundinacea, barley yellow dwarf virus disease reservoirs, disease transmission, role, Schizaphis graminum, Rhopalosiphum padi 1164.

USA, New Mexico,

- Vaccinium corymbosum*, stem canker, Botryosphaeria corticis, incidence 6831.

USA, North Carolina,

- Rhizoctonia solani, soil population levels, anastomosis, association, Arachis hypogaea 5094.

USA, New York,

- Bremia lactucae infection, Lactuca sativa, virulence 402.

USA, North Carolina,

- forests soil, sulfoquinovosulfur mineralization, soil microorganisms 6904.
 greenhouses, plant diseases, roots, crops, fungi, bacteria 9411.

USA, North Dakota,

- soil, Pseudomonas solanacearum survival, Lycopersicon esculentum wilt 8675.

USA, Ohio,

- tobacco mosaic virus, infection, effects on, Nicotiana tabacum, yield 9396.

USA, Pennsylvania,

- Vaccinium corymbosum*, fruit rot, Phomopsis vaccinii 3960.

USA, South Carolina,

- Triticum aestivum, disease resistance, leaf rust, genetic control, computer applications 7730.

USA, South Carolina,

- Glycine max, plant breeding, disease tolerance, Phytophthora root rot 7656.

USA, South Carolina,

- maize white line mosaic virus, detection, soil, infection plants, disease transmission 1200.

USA, South Carolina,

- root rot, Glycine max, disease control, fungicides seed treatments 7772.

USA, South Carolina,

- Rubus idaeus, spur blight, row width, role, disease control 7734.

USA, South Carolina,

- Zea mays, leaf blight, Exserohilum turcicum, pathogenesis 7668.

USA, Oregon,

- clubroot, association, lasmodiophora brassicae races detection 3977.

USA, Oregon,

- stands, biomass, nutrient cycles, mycorrhizas, fungi, soil, Pseudotsuga menziesii 6805.

USA, Oregon,

- Tsuga heterophylla seedlings, Cenococcum geophilum mycorrhizas formation 6912.

USA, Pennsylvania,

- drinking water contamination, hepatitis A virus, epidemiology, hepatitis A, man 7202.

USA, Rhode Island,

- Quercus wilt, epidemiology, disease spread 1482.

USA, Rhode Island,

- greenhouses, Rhododendron, incidence, mycorrhizas 4202.

USA, South Carolina,

- isolation, Gigaspora reticulata sp.nov., characterization 4187.

USA, South Carolina,

- corn, aflatoxins contamination, fluorescence, association, water content, assays 9291.

USA, South Dakota,

- Trematosphaeria circinans, root rot, crown rot, *Medicago sativa* 8532.

USA, Tennessee,

- plant viruses, Leguminosae, identification 5689.

USA, Texas,

- overwintering, Puccinia graminis f.sp.tritici races, stem rust, Triticum aestivum 4961.

- Phomopsis citri, post-harvest decay, grapefruits, fungicides disease control, fungicides, disease control, Phomopsis citri post-harvest decay, grapefruits, USA, Texas 4049.

- Puccinia graminis f.sp.avenae, stem rust, Avena sativa 4962.

- Rhizoctonia solani, soil population levels, anastomosis, association, Arachis hypogaea 5094.

USA, Utah,

- Medicago sativa*, crown rot 9322.

- USA, Virginia,**
Castanea dentata, canker, *Endothia parasitica*, disease transmission, role, Acarna 6925.
- USA, Washington,**
 clubroot, association, *lasmodiophora brassicae* races detection 3977.
 fishes, nitrogen cycle, volcanoes, environmental impact, effects on bacteria 5122.
 needlecast, *Phaeocryptopus gaeumannii*, infectivity, relationship, *Pseudotsuga menziesii* developmental stages 6928.
Pseudotsuga menziesii, *Phaeocryptopus gaeumannii* needlecast, disease control, aerial applications, chlorothalonil 6879.
Solanum tuberosum, late blight, epidemics 1267.
Triticum aestivum, scab, *Fusarium graminearum* 6771.
- USA, West Virginia,**
Castanea dentata, canker, *Endothia parasitica*, disease transmission, role, Acarna 6925.
 soil nitrate reduction, association, tillage, crop production (no-tillage) 5950.
- USA, Wisconsin,**
Phaseolus vulgaris, root rot incidence, *Phaseolus vulgaris* 3923.
Phytophthora megasperma f.sp. *glycinea* races, virulence 1130.
- USA, Wyoming,**
Medicago sativa, epidemiology, wilt, *Verticillium albo-atrum* 2123.
Medicago sativa, root rot, *Phytophthora megasperma* f.sp. *medicaginis* 3921.
Pinus contorta subsp. *latifolia*, nutrient dynamics, detritus, leaf litter, forest floor 4139.
 root rot, *Triticum aestivum*, fungi identification 6776.
 use *Neisseria meningitidis* extracts, immunogenicity, mice 784.
 biosynthesis, antibacterial activity, lichens 6.
- USSR,**
 activated sludge, lysis bacteria isolation, role decontamination 8062.
Brucella isolates, bacteriocins production 2593.
 corn, aflatoxins food contamination 5652.
 epidemics, *Salmonella typhimurium* isolation, antibiotic resistance 5166.
 fungi diseases, plants, rare species 7646.
 mountains, microorganisms relationship, soil 7827.
 oil fields, methanogenic bacteria isolation, characterization 3260.
Oryza sativa, Cyanophyta nitrogen fixation 7846.
 production, bakery products, beverages, enzymes use 6677.
 soil, *Actinomyces* incidence 5923.
 soil, ammonification, bacteria 7808.
 soil, bacteria, nitrogen fixation 2561.
 soil microorganisms, biogeochemistry, species diversity, bacteria, fungi 2347.
 soil, rhizosphere microorganisms, rhizoplane microorganisms, content, zinc, lead 2334.
 soils (podzolic), distribution, *Actinomyces* 1492.
- Ugilego,**
 loose smut, disease control, seed treatments, *Triticum aestivum* 1431.
 loose smut, disease resistance, genetic analysis, *Triticum aestivum* 7744.
 spore germination, iprodione, thiophanate methyl, effects on 7765.
- Ugilego avenae,**
 antifungal activity, triadimenol diastereoisomers 693.
 morphology, scanning electron microscopy use, fungicides effects on 8619.
- Ugilego colica,**
 smut incidence, Coix *laxyma-jobi*, Thailand 5770.
- Ugilego esculenta,**
 acid phosphatase, extracellular enzymes, purification 4625.
 smut, *Zizania latifolia* 373.
- Ugilego maydis,**
 cross resistance, dodine, association fenarimol resistance 7022.
 ergosterol biosynthesis, fungicides inhibition 1595.
 smut, incidence, fertilizers stimulation, *Zea mays* 9324.
- Ugilego nuda,**
 loose smut, *Hordeum vulgare*, seed treatments, fungicides, reviews 4132.
 loose smut, virulence genes, inheritance, *Hordeum* 4967.
- Ugilego paradoxa,**
 smut, *Echinochloa frumentacea*, incidence, India 2138.
- Ugilego scitaminea,**
 isolates differentiation, *Saccharum*, greenhouses 5001.
Saccharum officinarum smut, races, characterization, neutron activation analysis 6760.
 smut control, *Saccharum officinale*, Hawaii 5709.
 smut, disease resistance markers, glycosides, buds, *Saccharum officinale* 9359.
 smut, disease resistance, *Saccharum officinarum* 470.
 smut, *Saccharum*, disease resistance, heritability, diseases grades comparison yield 6859.
 smut, *Saccharum officinarum* 1175.
 smut, *Saccharum officinarum*, disease resistance 2258.
- Ugilego tritici,**
 infection, *Triticum aestivum*, factors affecting 380.
 loose smut, disease resistance, *Triticum aestivum* 8624.
 loose smut, *Triticum*, races, Australia 3941.
- Ugilego violacea,**
 cytochrome c, purification, amino acid composition 2736.
- Vaccination,**
 relationship enterovirus, poliovirus, sewage sludge, man 3470.
 sheep, sheep pox virus, vaccines, preparation 3458.
- Vaccines,**
 aerosols, Newcastle disease, antibody response, chickens 7188.
 antisera production, foot-and-mouth disease virus, guinea-pigs 5284.
 Bordetella bronchiseptica, preparation, immunogenicity, immunity, dogs 785.
 Bordetella pertussis, stability, methodology 3450.
 canine distemper virus, adenovirus (canine), parvovirus (canine), parainfluenza virus, leptospira, bacterins, immunogenicity, dogs 8924.
 contamination, fungi, antibiotic resistance, drug resistance, characterization 2396.
 development, rabies virus glycoproteins analogs gene expression, *Escherichia coli* 8046.
 development, traveller's diarrhea, man 8048.
 equine infectious arteritis virus, stability 8052.
 foot-and-mouth disease, DEAE adjuvants, immune response, pigs 2600.
 hepatitis B surface antigen+aluminum hydroxide, antibody response, man 783.
 hepatitis B virus, disease control, man 3457.
 herpesvirus (equine) 1, production, antigenicity, chickens 8053.
 Leptospira interrogans, immunogenicity, animal models 3455.
- Vaccines, (continued)**
 mumps virus, measles virus, rubella virus, immunogenicity, storage effects on 4429.
 Mycobacterium bovis, immunogenicity 2601.
 Newcastle disease virus, agglutination tests, methodology 2648.
 Newcastle disease virus, production, immunity, chickens 1687.
 Newcastle disease virus, production methodology effects on efficacy, chickens 8921.
 parainfluenza virus 3, proteins, hemagglutinins, immunogenicity, mice, sheep 7189.
 parvovirus (canine), antibody response, immunity, dogs 2599.
 parvovirus (canine), antigenic characteristics 2598.
 production, bacteria 5283.
 production, genetic engineering, foot-and-mouth disease, reviews 8921.
 production, viruses 5282.
 Pseudomonas aeruginosa, preparation, administration, function 6238.
 Pseudomonas aeruginosa, preparation, ultracentrifugation, ultrafiltration 3456.
 rabies, production, diploids cell culture 8922.
 rabies virus, production, BHK cells 7190.
 rabies virus, use enzyme-linked immunosorbent assay 820.
 sheep pox virus, preparation, vaccination, sheep 3458.
 splitting products, influenza A virus, influenza B virus, antibody response, children 3451.
 Streptococcus pneumoniae, composition, use, man, reviews 8049.
 Streptococcus pneumoniae, immunogenicity, man 3454.
- Vibrio cholerae* hypopolysaccharides, characterization 8051.
Vibrio cholerae, nutrient status, effects on, immunogenicity, chemostats 1686.
 viruses, genetic engineering 3453.
 viruses, production, genetic engineering 3452.
 Yersinia ruckeri, bacterins, immunogenicity, *Salmo gairdneri* 8925.
- Vaccinia virus,**
S-adenosylhomocysteine, analogs, effects on, RNA biosynthesis, mRNA, methylation 3349.
 antiviral agents, plants extracts 3343.
 disinfectants antiviral activity, efficacy, gel filtration methodology 9694.
 DNA incorporation, 6-thioguanine effects on 9691.
 DNA-binding protein, purification, characterization 7285.
 3-O-methyl adenosine, 3-O-methyl guanosine, inhibition, RNA biosynthesis 3360.
 mutants, drug resistance, 2'-O-methyladenosine 8739.
 prostaglandins, inhibition, replication, fibroblasts, cell culture 2485.
 samples, bacteria contamination, phenols elimination 2657.
- Vaccinium,**
 media (culture) effects on mycorrhizas formation 6970.
 Monilinia infection 4012.
- Vaccinium ashei,**
 symbiosis, *Elaphomyces persoonii*, USA, Florida, factors affecting 4192.
- Vaccinium corymbosum,**
 fruit rot, *Phomopsis vaccinii*, USA, North Carolina 3980.
 Monilinia vaccinii-corymbosi infection 4012.
 mycorrhizas inoculation, association, soil pH 475.
 pathology, blight, *Phomopsis vaccinii* 1271.
 root rot, *Phytophthora*, new records, USA, Arkansas 1263.
 stem canker, *Botryosphaeria corticis*, incidence, USA, New Jersey 6831.
 stunt, mycoplasma-like organisms 5010.
 tomato ringspot virus, tobacco ringspot virus, epidemiology 2161.
- Vaccinium macrocarpon,**
 fruit rot, post-harvest decay, pathogenicity, *Phyllosticta vaccinii*, *Botryosphaeria vaccinii* 9418.
 pathology, black rot, *Strasseria oxycocci* 4050.
 pathology, black rot, *Strasseria oxycocci*, *Ceuthospora lunata* 4052.
- Vaccinium scoparium,**
Abies lasiocarpa, habitat, relationship *Cronartium coleosporioides*, *Pinus contorta*, USA, Idaho 5862.
- Vaccinium stamineum,**
 Monilinia polycondi infection 4012.
- Vaccum packaging,**
 meat products, *Brochothrix thermosphacta* food contamination, biological control, *Lactobacillus* use 4835.
- Vacuoles,**
 adenosinetriphosphatase, purification, characterization, *Saccharomyces carlsbergensis* 45.
 isolation, *Neurospora*, mycelia breakage methodology 4536.
 vesicular-arbuscular mycorrhizas 7825.
- Vacuum packaging,**
 beef, oxygen barriers films, bacteria food contamination 261.
 Enterobacteriaceae, *Lactobacillus*, spoilage, meat 4879.
 films permeability, beef spoilage, *Lactobacillus* 5635.
 food, food contamination, conferences 5460.
 lactic acid bacteria inoculation, *Vibrio* spoilage, shellfish 8495.
 luncheon meat, factors affecting gram-negative bacteria growth 4878.
 meat products, spoilage, fungi 4880.
 onions, beets, spoilage, Enterobacteriaceae, *Lactobacillus* 4882.
 potatoes, spoilage, psychrophilic bacteria 4883.
 refrigeration, beef, spoilage, Enterobacteriaceae 5638.
- Vagina,**
Haemophilus vaginalis, media (isolation), man 8112.
- Vaginitis,**
Corynebacterium vaginale, identification, man 888.
- Validamycin,**
 inhibition, *Rhizoctonia solani*, hyphae extension, growth 1568.
 +media (culture), use, isolation, soil microorganisms, fungi 2709.
- Valine,**
 binding pyruvate kinase, *Neurospora crassa* 1931.
 effects on, leucine conversion, 3-methyl-1-butanol biosynthesis, *Saccharomyces cerevisiae*, nutrient requirements 3724.
 nutrient requirements, monensin biosynthesis, *Streptomyces cinnamonensis* 8016.
 production, Microcococcus varians, hydrocarbons utilization 7286.
 role, macrolide antibiotics biosynthesis, *Streptovorticillum kitasatoensis*, *Streptomyces fradiae* 8820.
 sensitivity, association, nutrient status, threonine effects on *Escherichia coli* 3304.
- Valerianolipids,**
 phytotoxins, isolation, identification 4904.
- Vancocyclin,**
 antibacterial activity, comparison teichomycin 8899.

Vancomycin, (continued)

- antibacterial activity, diptheroids 7977.
- antibacterial activity, pharmacokinetics, side effects 5172.
- antibacterial activity, *Staphylococcus aureus* 3383.
- antibacterial activity, *Streptococcus*, *Streptococcus* 8011.
- antibacterial sensitivity testing, gram-positive bacteria 6202.
- Bacteroides fragilis* antibiotic sensitivity testing 7130.
- Campylobacter fetus* subsp. *jejuni* drug sensitivity testing 4292.
- fluorescence immunoassays 9784.
- ± gentamicin, ± rifampicin, antibiotic synergism, antibacterial activity, methicillin resistance *Staphylococcus* 7126.
- + gentamicin, + tobramycin, antibiotic synergism, antibacterial activity, *Staphylococcus aureus* 771.
- Gram stain reaction, methodology, identification, gram-negative bacilli, gram-positive bacilli 9972.
- + rifampicin, antibacterial activity, *Enterobacteriaceae* 772.
- ± rifampicin, antibacterial activity, *Staphylococcus*, *Streptococcus* 3392.
- sensitivity, *Staphylococcus epidermidis* 6828.
- use autotrophs isolation, *Mycobacterium smegmatis* 8134.

Vanillic acid,

- production, *Streptomyces viridosporus*, vanillin conversion 4578.

Vanillin,

- antifungal activity, *Candida albicans*, *Cryptococcus neoformans* 2470.
- conversion, *Streptomyces viridosporus*, vanillic acid production 4578.

O-Vanillin,

- inhibition *Aspergillus parasiticus*, aflatoxins biosynthesis, cereals, oilseed crops 3874.

Vanoxonin,

- Saccharopolyspora hirsuta, biosynthesis, isolation, inhibition, tumors

thymidylate synthase 7449.

Vapem,

- fluorescence control, *Sclerotium cepivorum* white rot, *Allium* 9492.

treatment, *Phellinus weirii* infection, *Pseudotsuga menziesii* 545.

Varicella,

- man, nosocomial environments, airborne microorganisms, disease spread 3490.

Varicella-zoster virus,

- antiviral activity, E-5-(2-bromovinyl)-1- β -D-arabino furanosyluracil, E-5-(2-iodovinyl)-2'-deoxyuridine, E-5-(2-bromovinyl)-2'-deoxyuridine 5211.
- (E)-5-(2-bromovinyl)-2'-deoxyuridine derivatives antiviral activity 6073.
- cross-resistant, 9-(2-hydroxyethoxymethyl)guanine, phosphonoacetic acid, bromodeoxyuridine 7897.
- detection, radioimmunoassay, indirect fluorescent antibody test 6294.
- 9-(2-hydroxyethoxymethyl)guanine antiviral activity 9697.
- 9-(2-hydroxyethoxymethyl)guanine antiviral activity, mechanisms, reviews 9696.
- immunoglobulin M, man, detection, enzyme-linked immunosorbent assay 1751.
- infected cells, 5-iodo-2'-deoxyuridine pretreatment effects on replication 3365.
- infection, diagnosis methodology, deoxythymidine kinase detection 9848.
- neutralization tests, infection pathology, comparison herpesvirus (simian) 1756.
- varicella, man, nosocomial environments, airborne microorganisms, disease spread 3490.

Variola virus,

- antiviral activity, macrolide antibiotics 7941.

Varicellar acid,

- biosynthesis, lichens 3649.

Vascular system,

- disease spread, barley yellow dwarf virus, *Triticum aestivum*, *Avena sativa* 9342.

Verbicillium dahliae infection, isolation, *Vitis vinifera* 9406.

Vector-borne diseases,

- Cryptosporidium* canker, *Acer rubrum*, relationship *Oecanthus angustipennis* 9524.

Vectors,

- Achotina flava*, *Erwinia* canker, *Carica papaya*, symptoms, Mariana Islands 1222.
- Allygus mayri*, disease transmission, mycoplasma-like organisms, stunt, *Rubus* 2169.
- Aphididae, alfalfa mosaic virus infection, *Medicago sativa*, epidemiology 5696.
- Aphididae, disease transmission, barley yellow dwarf virus, *Hordeum vulgare* 9341.
- Aphididae, disease transmission, *Vigna unguiculata*, cowpea banding mosaic virus, cowpea necrosis virus, cowpea chlorotic spot virus 5673.
- Aphididae, watermelon mosaic virus 4986.
- Aphis craccivora*, pumpkin mosaic virus infection, *Cucurbita maxima*, transmission (horizontal) 1231.
- beet necrotic yellow vein virus, *Polyomyxa betae* ultrastructure, *Beta vulgaris* soil-borne diseases 83.
- Ceratocystis minor* blue stain, *Dendroctonus frontalis*, *Tarsonemus*, *Pinus* 3168.
- Ceratomyces trifurcata*, bean pod mottle virus detection, enzyme-linked immunosorbent assay, *Glycine max* 3067.
- Cicadellidae, yellows, mycoplasma-like organisms 9398.
- Ciraulifer tenellus*, *Spiroplasma citri* disease transmission, feeding, host plants 4920.
- cowpea banding mosaic virus infection, *Vigna unguiculata*, insecticides, disease control 5808.
- Deltocephalus flavicostus*, disease transmission, mycoplasma-like organisms, yellows, *Cocos* 1210.
- disease control, biological control, microorganisms, insecta 6622.
- disease transmission, barley yellow dwarf virus infection, *Hordeum vulgare* 3003.
- disease transmission, pea enation mosaic virus, *Lathyrus odoratus*, *Acyrtosiphon pisum* 342.
- disease transmission, research programs, biological control, insecta 1029.
- Graminella nigrifrons*, sex differences, maize chlorotic dwarf virus stunt, *Zea mays* 5697.
- Insecta, bacteria, plant diseases, reviews 2969.
- Insecta, biological control, developing countries 1028.
- Insecta, viruses, mycoplasma-like organisms, rickettsia-like organisms, plant diseases 1120.
- mycoplasma-like organisms, *Philaenus spumarius*, stunt, *Rubus* 3057.
- Myzus persicae*, potato virus Y detection, enzyme-linked immunosorbent assay 3517.
- necrotic yellows virus, *Lactuca sativa*, detection, enzyme-linked immunosorbent assay, *Hyperomyzus lactucae* 415.
- Nematoda, grapevine fanleaf virus infection, *Vitis vinifera*, disease control 4131.

Nephotettix, rice gall dwarf virus disease transmission, *Oryza sativa* 4967.

Nephotettix virescens, chemical control, plant extracts, disease transmission, rice tungro virus 7737.

Nephotettix virescens, disease transmission, rice tungro virus, *Oryza sativa* 360.

Nephotettix virescens, *Nephotettix nigropictus*, rice tungro virus, *Oryza* 4961.

Nephotettix virescens, rice tungro virus, disease control, insecticides 6847.

pathogens control, excretory products disposal, man 6273.

Vectors, (continued)

- Piarce's disease bacteria incidence, plants, USA, California 8531.
- Pismania quadratum*, rosette, Rickettsia-like organisms, *Beta vulgaris* 6810.
- rice tungro virus infection, *Oryza sativa*, insecticides, disease control 8613.
- Schizaphis graminum*, disease transmission, maize dwarf mosaic virus, *Gramineae* 5704.
- Scolytus*, microorganisms, Dutch elm disease, *Ulmus glabra* 1453.
- Simulium damnosum*, disease control, biological control, *Bacillus thuringiensis* 1020.
- spores, *Botryodiplodia theobroma*, *Periplaneta americana*, *Zonecerus vanguardus*, yams, post-harvest decay 442.
- stunt, bacteria, pathology, *Ambrosia artemisiifolia* 8576.
- tombato bushy stunt virus, disease transmission, man, *Lycopersicon esculentum* 1306.
- tungro virus, disease control, pest resistance, *Nephotettix virescens*, *Oryza sativa* 5548.
- viruses spot, *Gramineae*, symptoms, biological properties 1163.
- watermelon mosaic virus 2, *Jordan* 1247.
- wheat mosaic virus, *Polyomyxa graminis* ultrastructure, *Triticum aestivum* soil-borne diseases 363.
- Xiphinema americanum*, disease control, peach rosette mosaic virus infection, *Vitis labrusca* 5842.

Vegetable marrow mosaic virus,

- disease resistance, germplasm, *Curcubita pepo* 3116.

Vegetables,

- contamination, association, soil disinfection, bacteria 3253.
- cultivation, fungi, infection, disease control 2209.
- digestion, anaerobic microorganisms 4643.
- food contamination protection, bacteria 2918.
- freezing, survival, coliforms, *Escherichia coli* 2026.
- indicator species, coliforms, *Escherichia coli*, freezing effects on 6668.
- lactic acid fermentation, lactic acid bacteria 5607.
- oils, disease control, plant viruses 5813.
- plants, disease control, infection, fungi, bacteria 2267.
- sprouts, bacteria microflora 8473.

Vegetation,

- clay, nitrogen cycle, soil microorganisms effects on 603.
- sand dunes, correlation, activity, arylsulphohydrolase, cysteine desulphohydrolase, thiophosphate cyanide sulphurtransferase, British Isles 6955.

Veillonella,

- clinical isolates, incubation, anaerobic environments 2680.

Veillonella alcalescens,

- acetate kinase, purification, characterization 8225.
- methylalanyl-CoA decarboxylase, purification, characterization, cell membranes 7347.

Veillonella parvula,

- lipopolysaccharides biosynthesis, association, incorporation, fructose, ribose 8333.

Vein banding virus,

- infection, *Rubus*, *Ribes* 2180.

Velocity,

- wind, effects on, enumeration, airborne microorganisms, fungi 1813.

Velvet tobacco virus,

- detection methodology, plant cells 4473.

Venezuela,

- fruit juices, food contamination, yeasts 7574.

Venturia,

- benomyl, dodine resistance, measuring techniques 7886.

Venturia inaequalis,

- ascospores, infection, *Malus*, pathogenesis 7683.
- benomyl, benzimidazoles, resistance 4269.
- benomyl, drug resistance, characterization 7051.
- benomyl resistance 4270.
- benomyl resistance genes 5152.
- benomyl, resistances, factors affecting 437.
- overwintering, *Malus* scab 1201.
- scab, apples, cold storage effects on pathogenesis 3105.
- scab, biological control, screening, antagonists, *Chaetomium globosum* 3740.
- scab, *Malus pumila*, fungi biological control 5825.
- scab, *Malus*, temperature, relative humidity, effects on pathogenesis 2149.
- scab, pathogenesis, disease control, mathematical models, *Malus pumila* 5734.
- temperature effects on fruit bodies development 1224.

Venturia pirina,

- scab, disease control, urea, fenarimol, baycor 1395.

Veratrole,

- metabolism intermediates, guaicol, yeasts, characterization 8439.

Vernonia cinerea,

- witches' broom, mycoplasma-like organisms, disease transmission, *Orosius*

laphagorum ryukyensis 9424.

Vero cells,

- cell culture, bovine diarrhoea-mucosal disease virus elimination 6301.
- Escherichia coli* enterotoxins assays 310.
- 1-[2'-fluoro-2'-deoxy- β -D-arabinofuranosyl]thymine, antiviral activity, herpes simplex virus 1, herpes simplex virus 2 7036.
- herpes simplex virus 1, β -interferon, synergism, antiviral agents, antiviral activity 697.
- laboratory animals, domestic animals, toxicity, *Escherichia coli* toxins, gene transfer, phases conjugation 9315.
- Trypanosoma cruzi trypomastigotes infectivity, morphology, proteins biosynthesis 1824.

Verrucarin,

- binding dehydrogenase active sites, *Saccharomyces cerevisiae* 7625.

Verrucaric A,

- transformation, 16-hydroxyverrucarin A, *Rhizopus arrhizus* 7503.

Verrucaric B,

- transformation, 16-hydroxyverrucarin B, *Rhizopus arrhizus* 7503.

Verrucaric J,

- biosynthesis, *Stachybotrys chartarum* 5654.

Verrucoidin,

- Penicillium verrucosum* var. *cyclopium*, structure 6691.

Verruculogen,

- biosynthesis, characterization, *Penicillium raistrickii* 2071.

Versicolorone,

- structure, *Aspergillus versicolor* 2852.

Vertical distribution,

- Cochliobolus sativus*, soil, tillage, crop residues burning, *Triticum aestivum*

Vertical distribution, (continued)

9358.
soil microorganisms, soil profiles 2350.
- Verticilladiella**,
association, plant diseases, *Pinus taeda*, *Pinus strobus*, roots 5873
black stain, pathogenicity, *Pinus ponderosa* 5082.
root rot, susceptibility, *Scolytidae* pest attack, *Pinus ponderosa* 5865.
- Verticilladiella abietina**,
black stain, pathogenicity, *Pinus contorta* 9519.
black stain, pathogenicity, *Pinus ponderosa* 5082.
- Verticilladiella antibiotica**,
black stain, pathogenicity, *Pinus contorta* 9519.
- Verticilladiella penicillata**,
black stain, pathogenicity, *Pinus contorta* 9519.
- Verticilladiella provera**,
black stain, pathogenicity, *Pinus contorta* 9519.
decline, *Pinus strobus*, *Pinus resinosa*, *Pinus nigra*, USA, Minnesota 5077.
pathogenicity, *Pinus strobus*, *Pinus sylvestris*, *Pinus nigra*, plantations 5083.
pathogenicity, roots, relationship *Pissodes* approximatous, *Hyllobius*, infestation,
air pollution sensitivity, *Pinus strobus* 5866.
- Verticilladiella serpens**,
black stain, pathogenicity, *Pinus contorta* 9519.
roots infection, relationship air pollution sensitivity, *Pinus strobus* 5866.
- Verticilladiella wagneri**,
black stain, pathogenicity, *Pinus ponderosa* 5082.
black stain, *Pseudotsuga merziesii* roots 9526.
- Verticillium**,
dry bubble disease, pathogenicity, *Agaricus bitorquis*, *Agaricus bisporus* 2218.
infection, *Humulus*, pathogenesis, susceptibility 2193.
phytopathogenic fungi, survival, soil 7807.
spoilage effects on seeds germination, *Vigna catjang* 3919.
wilt, *Arachis hypogaea*, metham sodium disease control 1411.
wilt, disease resistance, *Medicago sativa* plant breeding 7669.
wilt incidence, *Persea americana*, Chile 5737.
wilt, *Solanum melongena*, mulches effects on pathogenicity, yield 476.
wilt, susceptibility, *Gossypium hirsutum*, relationship, radicle exudates,
+chilling 4030.
- Verticillium albo-atrum**,
chitinase, purification characterization 2779.
infection, *Lycopersicon esculentum* seedlings roots, pathogenesis 4028.
infection, *Solanum tuberosum* leaves, pathology, hypersensitive response 3086.
interaction, *Medicago sativa*, leaves, phytoalexins 2999.
Lycopersicon esculentum roots penetration, pathogenesis 6825.
pathogenicity, *Medicago sativa* 9331.
pectic esterase production, metals cations effects on 7313.
polyphyletic enzymes production, fungicides effects on 7314-4.
sclerotia, methyl bromide+chloropicrin, relative humidity effects on toxicity
499.
seed-borne diseases, detection, *Medicago sativa*, seeds 3918.
strains, pathogenicity, *Medicago sativa* 1131.
virulence, *Medicago sativa*, field trials, Europe, comparison, North America 8558.
wilt, defense mechanisms, enzymes, *Lycopersicon esculentum* 4077.
wilt, disease resistance assays, *Medicago sativa* 4063.
wilt, effects on, *Spodoptera eridania*, growth, feeding, *Medicago sativa* 4943.
wilt, epidemiology, *Medicago sativa*, USA, Wyoming 2123.
wilt, *Medicago sativa*, India 4941.
wilt, pathogenicity, genetic analysis, *Lycopersicon esculentum*, *Medicago sativa*
3049.
- Verticillium dahliae**,
benomyl, antifungal activity 1412.
bioassays, detection, tissues, *Solanum tuberosum*, disease resistance 9063.
complementation genetic analysis, gene mapping, melanins deficient mutant,
association *Gossypium* wilt 7396.
fungistasis, relationship, soil depth, soil microorganisms, environmental factors
584.
infection, *Acer rubrum*, stems water potential, relationship, electrical
properties 2311.
infection, *Acer*, temperature effects on growth 2321.
infection, *Gossypium hirsutum*, *Rotylenchulus reniformis* effects on disease
resistance 8612.
infection, *Solanum melongena*, *Capsicum frutescens*, *Lycopersicon esculentum*, plant
extracts, antifungal activity, *Cladosporium cucumerinum* 6877.
infection, vascular system, isolation, *Vitis vinifera* 9406.
inoculum quantitation, relationship *Gossypium* defoliation 9390.
interaction pectin-degrading bacteria, *Fusarium*, wilt, *Amoracia rusticana* 1253.
pectic esterase production, metals cations effects on 7313.
root rot, soil acidification inhibition, *Datura stramonium* 6837.
sclerotia germination, competition, environmental stress, nutrient availability,
soil 9573.
soil-borne diseases, biological control, *Gossypium hirsutum* 7769.
spore germination, carbon dioxide, oxygen, soil aeration 6968.
wilt, disease resistance, *Gossypium* 4086.
wilt, disease resistance, plant breeding, seedlings, *Lycopersicon esculentum*
5045.
wilt, disease resistance, *Solanum melongena* cultivars comparison 6853.
wilt, *Gossypium hirsutum*, mathematical models, plants growth relationship 2134.
wilt, interaction, *Erwinia carotovora*, black leg, effects on, *Solanum tuberosum*
1251.
wilt, *Lycopersicon esculentum* cultivars, disease resistance 5043.
wilt, proteins lipopolysaccharides complex characterization, *Solanum tuberosum*
1246.
wilt, *Talaromyces flavus* biological control, *Solanum melongena* 1390.
- Verticillium fungicola**,
Basidiomycetes pathogens, resistance, antifungal agents 5826.
dry bubble disease, prochloraz, disease control, Basidiomycetes 6824.
- Verticillium fungicola var fungicola**,
infection, *Agaricus*, prochloraz, disease control 4118.
- Verticillium lamellicola**,
4-O-carbomethoxylamellilic acid anhydride, monomethyl 3-chlorolamellilic acid,
lamellilic acid anhydride, characterization 8378.
- Verticillium lecanii**,
intraspecific relationships, *Uromyces appendiculatus*, population dynamics, rust,
Phaseolus vulgaris 2108.
microflora, *Hordeum fungiculus* treatment effects on 7766.
pathogenesis, *Brassica campestris*, fluorescence, microscopy 2188.
pest control, biological control, *Trialetrodes vaporariorum* 126.

Verticillium lecanii, (continued)

- secondary metabolism, insecticides, production 6593.
- Verticillium nigrescens**,
incidence, Glycine 9321.
plants diseases, new records, New Zealand 3899.
- Verticillium theobromae**,
crown rot, *Musa sapientum*, pathogenicity 3995.
- Vesicles**,
Penicillium chrysogenum protoplasts, immobilized cells, penicillin G production
2542.
phospholipids, glycerophosphate acyltransferase, reconstitution, kinetics, N.M.R.
3703.
Trifolium pratense endomycorrhizas, ultrastructure 6974.
- Vesicular stomatitis virus**,
antigens biosynthesis, relationship α -interferon antiviral activity, enzyme
immunoassay 1762.
antiviral activity, interferon, regulation, double-stranded RNA, L cells 7105.
antiviral agents effects on replication 6068.
glycoproteins, oligosaccharides, structure, swainsonine, effects on 4314.
infection inhibition, interferon, neurons, tissue culture 2490.
infection, tissue culture, interferon levels, enzyme immunoassay 1749.
interferon, antiviral activity, immunoassays 9698.
interferon, inhibition, protein biosynthesis, antiviral activity 1575.
purification methodology, association Ehrlich ascites tumor cells 1752.
ribavirin, antiviral activity 7948.
- Vesicular-arbuscular mycorrhizas**,
alkaline phosphatase levels, roots, stimulation growth, *Vigna unguiculata* 9560.
Allium porrum, *Glomus mosseae* symbiosis, carbon uptake 1471.
citrus dimens, photoperiod effects on 4209.
Citrus jambhiri, effects on water uptake 4135.
colonization, roots, *Agropyron trachycalyum*, soil amendment, revegetation, land
reclamation, mines 9542.
Dactylis spicata, effects on, association salinity 5098.
effects on, growth, *Trifolium subterraneum* 6942.
+fertilization, effects on *Juniperus chinensis* var. *sargentii* 4134.
formation, *Chrysanthemum norfolium* buds development effects on, *Glomus*
fasciculatus 4197.
Gigaspora margarita, *Lolium perenne*, carbon sources competition 564.
Glomus epigaeum, symbiosis, *Malus*, effects on growth 5097.
Glomus fasciculatus, symbiosis, *Ornithogalum umbellatum*, cell walls structure
6357.
Glomus fasciculatum, alkaline phosphatase, acid phosphatase, roots, *Arachis*
hypogaea 6947.
Glomus fasciculatus, effects on protein composition, nitrogen levels, *Arachis*
hypogaea 6949.
Glomus fasciculatus, phosphate fertilizers uptake, growth, *Lolium rigidum*,
Trifolium subterraneum 9547.
Glomus fasciculatus, inoculation, effect on *Capsicum annuum* growth, yield 4227.
Glomus mosseae, spores, *Vicia faba*, crop fields 3186.
Glomus mosseae, symbiosis, *Lactuca sativa*, nitrate, phosphate, effects on 5903.
Glomus tenuis, interaction, *Glomus monosporus*, symbiosis 6944.
Glycine max, soil temperature effects on 2332.
Gramineae, bromide uptake, chloride uptake 5101.
growth, association, organic matter, soil 7810.
habitat, ecological distribution, soil properties 570.
inhibition Nematoda, rhizosphere, plants 5095.
inoculation, *Citrus*, effects on growth 5093.
inoculation, phosphorus treatment, *Manihot esculenta* response 4221.
inoculum production, nutrient uptake, agricultural practices, land reclamation
9540.
interaction, fungi, pathogens, plant diseases 317.
interaction, roots, *Trifolium repens* 5893.
Lobularia maritima, *Lunaria annua* 6969.
morphology, *Pentstemon* 2327.
nutrient transport, absorption, ecophysiology, population ecology, host plants
9539.
petroleum sand, *Pinus banksiana*, *Agropyron trachycalyum* 5916.
phosphate uptake, *Allium cepa*, *Capsicum* 6948.
phosphate uptake, seedlings, trees 9503.
physiology, nutrient transport, roots, host plants 9537.
plants symbiosis, use, agricultural practices, reviews 4188.
Rhizobium, phosphate levels, soil, yield, *Medicago sativa* 7850.
role, growth, nutrient uptake, *Medicago sativa*+*Rhizobium meliloti* nodulation,
phosphorus fertilizers effects on 6943.
role *Hordeum distichon* nutrient uptake, growth, Denmark 5905.
roots morphology 587.
saprophyte, soil, relationship, organic matter 8672.
soil, fumigants, fungicides effects on 622.
soil growth 5092.
strip mines, soil amendment, spores, association, *Agropyron trachycalyum* 1480.
symbiosis, *Agropyron trachycalyum*, mines soil+soil amendment 4203.
symbiosis, association, *Fraxinus pennsylvanica* growth 4205.
symbiosis, Gramineae, *Pisum sativum*, colonization 5902.
symbiosis, potassium permanganate effects on 8671.
Trifolium, morphology comparison 6338.
Triticum, effects on drought tolerance 4185.
vacuoles 7825.
- Veterinary medicine**,
disinfection, sterilization 6274.
- Vibramycin**,
Bacteroides fragilis antibiotic sensitivity testing 7130.
- Vibrio**,
antibiotic sensitivity testing, dilution tests, agar diffusion test 3388.
endotoxins, purification, characterizations 300.
enterotoxins, production 2949.
environmental factors, ecological distribution, coastal waters 6259.
food contamination, ripening, salmon 2030.
gastrointestinal tract clinical isolates, norfloxacin antibacterial activity
2455.
pathogenicity, *Crossostoma rhizophorae*, Jamaica, public health 8968.
Pisces pathogens, biological properties, identification methodology 1785.
 α radiation damage, antibiotics resistant mutant effects on 6026.
sarcocarpal sensitivity 7067.
spoilage, lactic acid, bacteria inoculation, vacuum packaging, shellfish 8495.
- Vibrio alginolyticus**,
antibacterial activity, nocardin 1674.

Vibrio alginolyticus, (continued)

glucose, metabolism, calorimetry, measuring techniques 1772.
identification, *Vibrio parahaemolyticus*, isolation, media (culture), methodology 2678.

***Vibrio anguillarum*,**

plasmids, drug resistance, conjugation, *Vibrio parahaemolyticus* 6015.

Ippopolysaccharides vaccines, characterization 8051.

***Vibrio cholerae*,**

antibiotic sensitivity testing, mecillinam 3407.
antibiotic sensitivity testing, reservoirs, water isolates 7968.
attachment, Copepoda, association, epidemiology, marine environment 2622.
biofilm growth, food contamination 3835.
chemostats, nutrient status, effects on, immunogenicity, vaccines 1686.
cholera enterotoxins biosynthesis 6713.
cholera, man, epidemiology, sanitation relationship 2635.
cholera toxins biosynthesis 9314.
cholera, water-borne diseases, man, drinking water 2633.
clinical isolates, drug resistance, 4-diamino-6,7-diisopropyl-pteridine 8730.
enterotoxins, antigenic determinants 6714.
enterotoxins biosynthesis, continuous culture, recycling 8517.
enterotoxins, characterization, purification 8516.
enterotoxins characterization, use, immunofluorescence, neutralization 7634.
enterotoxins, neutralization 2957.
enterotoxins, production 2949.
enterotoxins, purification, characterization 292.
enterotoxins, purification, characterization 2951.
food contamination, pasteurization, cooking, oysters 2912.
food contamination, seafood, toxicity man 1070.
furazolidone antibacterial activity, enhancement, caffeine 1560.
growth, batch culture, fermenters, factors affecting 2706.
identification, fluorescent antibody test 842.
isolation, estuaries, microbial pollution 2629.
ipopolysaccharides, production, media (culture) 3891.
lysis, Tris+EDTA treatment, association nitrofurantoin resistance 7927.
microbial pollution, counting methods, estuaries, marine environment 6258.
mucinase, purification, characterization 963.
plants extracts antibacterial activity, Iran 2458.
rampicin antibiotic resistance, β -D-galactosidase, catalase, alkaline phosphatase activity 6018.
sanguinarine sensitivity 7067.
toxins, agglutination measuring techniques 9302.
toxins, radioimmunoassay 9294.

***Vibrio fluvialis*,**

enterotoxins, production 2949.
methodology, media (enrichment), liquid culture, enumeration 8136.

***Vibrio gazogenes*,**

prodigiosin, production, growth conditions 6604.

***Vibrio haemolyticus*,**

incidence, Pisces, Crustacea, Kenya 1069.

***Vibrio Harveyi*,**

alkanol monooxygenase (FMN-linked), bioluminescence kinetics, mechanisms 7390.
daunomycinomycin A reduction, NADH dehydrogenase catalysis 4633.
luciferin 2-monooxygenase subunits, 1-diazo-2-oxundecane binding, photoaffinity labelling 2800.

persistence, depuration, *Mercentaria mercentaria* 2052.

***Vibrio metschnikovii*,**

water isolates, rivers, phenotypes 6267.

***Vibrio mimicus*,**

cholera toxins biosynthesis 9314.
enterotoxins biosynthesis, continuous culture, recycling 8517.
enterotoxins, production 2949.
isolation, sea water 6265.

***Vibrio parahaemolyticus*,**

amylase biosynthesis, peptones effects on 1942.
conjugation, *Vibrio anguillarum* plasmids, drug resistance 6015.
furazolidone antibacterial activity, enhancement, caffeine 1560.
identification, *Vibrio alginolyticus*, isolation, media (culture), methodology 2678.

isolation, seafood, sediments, marine environment 2051.
media (selective), polymyxin B loss, seafood 222.
outer membrane proteins, purification, characterization 9124.
oysters, food contamination 2910.
persistence, depuration, *Mercentaria mercentaria* 2052.
proteinase biosynthesis, growth rate correlation 1943.
proteinase, multiple forms, fractionation 59.
sanguinarine sensitivity 7067.
serotyping, identification, sea water isolates 3552.

***Vibrio vulnificus*,**

hydrogenase, purification, characterization 51.

***Vibrio vulnificus*,**

media (selective) 9948.
siderophores production, association, iron acquisition 8369.

***Vibrionaceae*,**

antigens use classification 2666.

oxidase test, agar media, comparison 9043.

***Vicia angustifolia*,**

Rhizobium inoculation, nodulation, nitrogen fixation 6992.

***Vicia faba*,**

Ascochyta fabae infection, disease control 1138.
bean yellow mosaic virus infection, incidence, host range, disease transmission, antigenic characteristics 1128.
Botrytis cinerea, siderophores, lesions, development 3000.
Botrytis fabae infection, lesions spatial distribution, statistical analysis methodology 2110.
broad bean stain virus infection, pathogenesis 338.
Glomus mosseae spores, crop fields 3186.
growth stage, effects on phyllosphere distribution, Actinomycetes, yeasts 6946.
inheritance, disease resistance, rust, *Uromyces viciae-fabae* 2253.
lectins, Rhizobium leguminosarum interaction, 2,4-D, 2,4,5-T, effects on agglutination 8692.
necrosis, role, interaction, broad bean leaf roll virus+pea early-browning virus+pea enation mosaic virus 7664.
nitrogen fixation analysis, isotopes methodology 5131.
nitrogen fixation, nitrogen-15, measuring techniques, field trials 9611.
nitrogen nutrient uptake, inhibition nitrogen fixation 6865.

***Vicia faba*, (continued)**

nitrogen-fixing bacteria, factors affecting phyllosphere distribution 5957.
nodules, Rhizobium, nitrogen fixation 3231.
pathogenicity, *Botrytis fabae*, conidia, survival 5677.
photosynthesis, carbon sources, utilization, mycorrhizas, Rhizobium, nodulation, nitrogen fixation 615.
phyllosphere microorganisms, gibberellic acid effects on 9601.
plant diseases, surveys 7659.
Rhizobium leguminosarum effects on yield 6982.
roots, association, mycorrhizas, biomass 553.
straw, composting, mesophilic fungi colonization 3781.
straw, thermophilic fungi colonization, composting 3780.
tissues, plant viruses hybridization analysis methodology 9665.
Uromyces viciae-fabae infection, scanning electron microscopy 5695.
yield, phosphate-dissolving bacteria inoculation effects on 5892.

***Vicia villosa*,**
Rhizobium inoculation, nodulation, nitrogen fixation 6992.

***Vigna*,**
roots, shoots, genotypes, Rhizobium, nitrogen fixation 3234.

***Vigna catjang*,**
seeds germination, fungi spoilage effects on 3919.

***Vigna mungo*,**
histopathology, urbean leaf crinkle virus 6735.
mung bean yellow mosaic virus infection, disease resistance, genetic analysis 3137.
Rhizobium, hydrogen uptake relationship nitrogen fixation 7002.
Rhizobium strains, inoculation, nitrogen fixation, host range 8679.

***Vigna radiata*,**
cowpea severe mosaic virus infection 4930.
disease resistance, yellow mosaic virus 5806.
fungi infection, bioteriateration, seed-borne diseases 3915.
infection, urbean leaf crinkle virus, benomyl effects on disease transmission 3152.
leafspot, *Xanthomonas phaseoli*, bleaching powder, antibacterial activity 2289.
leafspot, *Xanthomonas phaseoli*, disease control, fungicides, antibiotics 509.
nodulation, nitrogen fixation, inhibition, mung bean yellow mosaic virus infection 1144.
nodules, Rhizobium, nitrogenase activity, relationship extracellular polymers 8678.
powdery mildew, benomyl, disease control 1433.
seed rot, role production, pectin lyase, pectate lyase, *Phoma exigua*, *Vigna radiata* 7413.
seeds, *Aspergillus* infection, storage conditions effects on 2111.
seeds, inoculation, Rhizobium, survivability 1498.

***Vigna sesquipedalis*,**
witches broom, mycoplasma-like organisms, disease transmission, *Orosius lotophagorum* ryukyensis 9424.

***Vigna sinensis*,**
cowpea mosaic virus infection, effects on, biomass, primary production, growth 7649.
cultivars, Rhizobium strains cross inoculation 5123.
phenic acid composition, disease resistance, tobacco necrosis virus infection 5460.
phoric acid effects on Rhizobium nodulation 4251.
rust, susceptibility, *Phaseolus vulgaris*, association, rust developmental stages 6742.
rust, *Uromyces appendiculatus*, Oman, new records 7661.
tobacco necrosis virus infection, osmotic stress effects on enzymes 413.

***Vigna unguiculata*,**
blight, *Xanthomonas campestris*, comparison *Phaseolus vulgaris*, pathogenesis 340.
Coleoptera reargulation factors role transmission, tobacco mosaic virus, southern bean mosaic virus, bean pod mottle virus, tobacco ringspot virus 6733.
cowpea aphid-borne mosaic virus infection, disease resistance 3139.
cowpea banding mosaic virus infection, effects on, nodulation, nitrogen fixation 5691.
cowpea banding mosaic virus infection, insecticides, disease control, vectors 5808.
cowpea chlorotic mottle virus infection, transmission (seed), disease resistance 332.
cowpea mosaic virus infection effects on yield 337.
cowpea mosaic virus transmission (seed), screening association prevention 1124.
crop rotation, *Phaseolus vulgaris*, Zea mays, nodulation, growth 1504.
damping-off, *Rhizoctonia solani*, herbicides effects on 9482.
disease resistance breeding cowpea aphid-borne mosaic virus, cowpea mosaic virus, bacteria, infection 3138.
disease transmission vectors, Aphididae, cowpea banding mosaic virus, cowpea necrosis virus, cowpea chlorotic spot virus 5673.
domination cowpea chlorotic mottle virus, temperature effects on 457.
infectious diseases, germplasm reaction 5688.
necrosis, *Fusarium equiseti*, India 2109.
necrosis, haustoria growth, rust 3922.
necrosis, viruses, environmental stress, relationship, electrolyte balance 2993.
nitrogen fixation, nitrogen fertilizers effects on 5105.
nodulation, Rhizobium, growth rate, temperature effects on, competition 9588.
peanut mottle virus infection, epidemiology, pathogenesis 3927.
plant diseases, *Fusarium equiseti*, *Pseudomonas*, factors affecting pathogenesis 4931.
potyvirus infection, pathogenicity, *Populus* isolates 316.
Rhizobium, hydrogen production, nutrient dynamics, carbon, nitrogen 4247.
Rhizobium japonicum symbiosis, characterization 8700.
Rhizobium, nodulation 5230.
Rhizobium strains, inoculation, nitrogen fixation, host range 8679.
roots exudates, nitrogenase activity, Rhizobium japonicum 3225.
roots, growth levels, vesicular-arbuscular mycorrhizas 9560.
seeds, isolation, *Xanthomonas campestris* pv. *vignicola* 4944.
susceptibility, tobacco necrosis virus infection 2986.
tobacco streak virus infection, host specificity, pathogenesis, disease transmission 1126.
Xanthomonas campestris pv. *vignicola* infection, disease resistance 9471.
Zea mays, pollen, enhancement, *Colletotrichum lindemuthianum* infection, inhibition, cowpea mosaic virus infection 327.

***Vinca rosea*,**
enzyme-linked immunosorbent assay, *Spiroplasma citri* detection 3046.
growing disease transmission, *Cuscuta* role 9448.
sour cherry necrotic ring spot virus infection 2144.
tissue culture, *Agrobacterium tumefaciens* binding, crown gall 2977.

- Vinclozolin**,
= *Bacillus subtilis* biological control, white rot, *Allium cepa*, seed treatments 4103.
disease control, *Botrytis cinerea*, fruit rot, *Vitis vinifera* 8639.
disease control, grey mold, *Botrytis cinerea*, *Cyclamen graecum* 1424
effects on *Monilinia fructicola*, growth, sporulation, isolation 2282.
resistance, *Monilinia fructicola*, infection, *Prunus persica*, pathogenicity 2278.
resistance, *Monilinia lula* 7900.
use, ornamental plants disease control 5056.
- Vindole**,
conversion, laccase, fungi 7447.
- Vinegar**,
production, analyzers 9234.
- Viomycin**,
antibiotic resistance, viomycin biosynthesis, *Streptomyces puniceus* 7161.
- Virenomycin**,
components, separation techniques, characterization, antibacterial activity 779.
- Virginiamycin S5**,
isolation, structure, mass spectroscopy 5268.
- Viridicatumtoxin**,
Penicillium expansum, biosynthesis 6696.
- Viridigroisein**,
analogs, production, *Streptomyces griseoviridis*, proline hydroxylation mutants 8911.
- Viridigroisein II**,
isolation, structure, mass spectroscopy 5268.
- Viruses**,
aggregation, barley stripe mosaic virus, carnation ringspot virus, immunoelectrophoresis 3543.
Moloney leukemia virus, infection, cells, interferon, antiviral activity, biochemical analysis 698.
tulip breaking virus, morphology, transmission (mechanical), *Lilium longiflorum*, *Chenopodium* 7707.
- Virolds**,
RNA, stunt, *Arctium tomentosum*, *Arctium lappa*, etiology 4021.
- Virulence**,
Aphanomyces euteiches f.sp.phaseoli, *Phaseolus vulgaris*, comparison *Pythium ultimum* 347.
association, disease resistance, downy mildew, *Bremia lactucae*, *Lactuca sativa* 6820.
bioassays, methodology, *Deuteromyces*, *Insecta* 1002.
bioassays, pest control, *Entomophthorales*, *Insecta* 1001.
blight, *Cryptorchestia* parasitica, effects on, dieback, *Castanea dentata* 8655.
blight, *Endothia parasitica*, disease resistance, *Castanea dentata* 8623.
bryodiploia, hyperemia infection, *Ulmus pumila* 2320.
Bremia lactucae infection, *Lactuca sativa*, USA, New York 402.
Cochliobolus carbonum infection, *Zea mays* 375.
Cryptosporium corticale, sooty bark, *Acer pseudoplatanus* 6931.
Culex pipiens, *Anopheles stephensi*, *Metarhizium anisopliae*, conidia, viability, temperature, relative humidity, effects on 7478.
Culex pipiens, storage conditions, effects on, *Metarhizium anisopliae*, conidia, viability 7480.
ear rot, *Gibberella zeae*, relationship, *Zea mays*, genotypes 3945.
Endothia parasitica, blight, *Castanea dentata*, Greece 6916.
Erysiphe graminis f.sp.tritici, powdery mildew, mutants, genetic analysis, *Triticum aestivum* 356.
Erythrorhizum turcicum, leaf blight, disease resistance, Ht gene, *zea mays* 1370.
Fusarium oxysporum f.sp.medicaginis, wilt, disease resistance, *Medicago sativa* 3914.
genes, *Ustilago nuda*, loose smut, inheritance, *Hordeum* 4967.
Hyphomycetes, use biological control, *Insecta* 1004.
mycoplasma-like organisms, digitonin effects on, tissue culture, *Nicotiana glauca* 2175.
Phomopsis, Diaporthe, Glycine max stem canker 3925.
Phytophthora megasperma f.sp.glycinea races, USA, Wisconsin 1130.
plant diseases, relationship, *Pseudomonas syringae* pv.syringae outer membranes protein composition 7307.
plasmids, *Agrobacterium rhizogenes*, transfer methodology, R factors use 4488.
Pseudomonas aeruginosa, natural selection, gentamicin antibiotic resistance 6012.
Pseudomonas syringae pv.savastoni, *Olea europaea*, leaves 5742.
Puccinia coronata, *Avena sativa*, association disease resistance genes 5035.
Puccinia coronata, *Avena sativa*, disease resistance 8610.
Puccinia coronata f.sp.avenae, *Avena sativa* 3942.
Puccinia graminis f.sp.avenae, stem rust, *Avena sativa* 9352.
Puccinia hordei, leaf rust, *Hordeum vulgare* 2121.
Sclerotinia, host plants, *Xanthium pensylvanicum* 5753.
sheath blight, *Rhizoctonia solani*, *Sorghum bicolor*, *Oryza sativa* 1193.
Verticillium albo-atrum, *Medicago sativa*, field trials, Europe, comparison, North America 8558.
Xanthomonas campestris pv.oryzae, blight, *Oryza sativa* 1195.
Xanthomonas campestris pv.oryzae, *Oryza sativa* blight 352.
- Virus-like particles**,
disease transmission, *Bemisia tabaci*, sida alba, *Gossypium hirsutum* 2199.
little cherry disease, isolation, characterization, *Prunus avium* 5732.
Vitis vinifera, leaf-roll, pathogenesis, ultrastructure 5782.
white leaf disease, etiology, *Oryza sativa* 8556.
- Viruses**,
antigenic characteristics, preservation, phosphorous tungstic acid + ammonium molybdate, storage 7226.
antigens, detection, enzyme-linked immunosorbent assay methodology 7216.
antigens localization, protein A + gold catting 1750.
antimicrobial activity, interferon 7952.
antiviral activity, interferon 3355.
antiviral activity, monolaurin, = butylated hydroxyanisole, = sorbic acid, = methyl hydroxybenzoate 700.
antiviral activity, phenylphenyltrine 7097.
bacteria, inactivation, activated sludge 791.
bacteria, *Insecta* 4722.
biological control, *Insecta* 7471.
biological control, *Insecta* pathogenicity plants, books 9093.
bunchy top, disease transmission, *Pentalonia nigronervosa*, *Musa paradisica* 7677.
cell culture, bottles rotation 3532.
cell size measuring techniques, Coulter nano-sizer 2646.
contamination, serological tests reagents, quality control 5229.
culture collections, Mycoplasma contamination, fluorescent probes detection 6293.
cytotoxicity, reduction, sewage sludge, wastewater treatment 8950.
- Viruses, (continued)**
detection, enzyme-linked immunosorbent assay, clinical microbiology 9858
detection, sampling methodology, activated sludge, wastewater treatment 6251.
detection, sediments, collection, methodology, marine environment 2655.
disease control, antisera, ornamental plants 2270.
disease control, plant breeding, germplasm, crops 2242.
disease transmission, citrus 3970.
disinfection, wastewater treatment, ozonation 5324.
DNA, RNA, hybridization analysis, detection, plant cells 6299.
DNA separation techniques 1739.
elimination, meristem tip culture, *Allium sativum* 1385.
elimination, meristem tip culture, *Fragaria* 2243.
elimination, *Prunus avium* heat treatments 8585.
enteritis, isolation methodology, estuaries sediments 8106.
enzyme-linked immunosorbent assay, equipment cleaning systems 1764.
enzymes, antiviral agents interaction, activity mechanisms 9695.
etiology, streak, *Persea americana* 9372.
food contamination, seafood 8466.
fungi, role, plant diseases, reviews 1119.
genomes, detection, cell culture, immunofluorescence, immunoperoxidase test, methodology 7231.
helper viruses, plant diseases, reviews 2979.
hemagglutination, hemagglutination inhibition, methodology, erythrocytes stabilization 5371.
hepatitis, diagnosis, enzyme-linked immunosorbent assay, use, amidease 2659.
host-pathogen interactions, disease resistance, genetic factors, plants 468.
identification, diagnosis, methodology, automated methods, books 5449.
identification, plant diseases, *Vitis vinifera* 1283.
inactivation, ammonia role, heat effects on 7945.
incidence, distribution, *Carica papaya*, USA, Florida 5020.
induction, disease resistance, plants, reviews 7751.
infection, *Malus pumila*, nitrate, nutrition, effects on 389.
infected plants, methodology, isolation, double-stranded RNA 3897.
infection, *Cucurbita pepo*, field trials 5018.
infection, diagnosis, ornamental plants 2185.
infection, germplasm, seed-borne diseases, surveys 2092.
infection, *Gomphrena globosa*, leaves hypersensitive response 2156.
infection, *Lycopersicon esculentum*, relationship, electrophoresis, acids solubility proteins 2983.
infection, *Malus*, effects on amino acids, nitrogen association 4974.
infection, *malus*, nitrate effects on 3027.
infection, *Medicago sativa* 2103.
infection, meristem tip culture elimination, association, regeneration 469.
infection, *Nicotiana glutinosa*, glycoproteins defense mechanisms, polyclonal, cyclic AMP + cyclic GMP activation 3136.
infection, *Nicotiana tabacum*, *Hordeum vulgare*, guanidine treatment 1198.
infection, *Oryza sativa*, Japan, Asia, Southeast 4955.
infection, plants, association, tissues color, calcium chloride preservatives 2093.
infection, plants, ribavirin, 2,4-dioxo-hexahydro-1,3,5-triazine, treatment 312.
infection, plants, 2-chloroethylphosphonic acid effects on pathogenicity 319.
infection, relationship, phenols solubility proteins, plants leaves, electrophoresis 2982.
infection, stimulation, disease resistance, plants 3120.
infection, treatment, antiviral agents, man, reviews 3364.
infection, *Trifolium repens*, pathology, association, Aphididae filters prevention transmission 1147.
infection, *Vitis vinifera*, isolation methodology 4019.
infection, *Zea mays*, transmission, symptoms, control 5723.
infectivity, association air drying sludges 7195.
infectivity dose, determination, animal models 9841.
isolation, incidence, waste water, survival association wastewater treatment 1766.
isolation, reservoirs, physicochemical properties, biochemical analysis 795.
leafroll, *Vitis vinifera*, cytopathology, histopathology 429.
leafspot, *Agave sisalana* 7698.
levels, estuaries, sewage effluents waste disposal effects on 1704.
levels, sewage, measuring techniques 5373.
Lupinus diseases, association, crop rotation 4985.
microorganisms, microbiology, books 8184.
morphology, infection, leaves, *Acer platanoides*, *Acer pseudoplatanus* 2309.
mosaic disease etiology, *Cucumernopsis edulis*, isolation, characterization, Nigeria 4025.
mosaic disease, *Telfaira occidentalis*, disease resistance 5042.
mosaic disease, *Triticum*, etiology, India 3953.
necrosis, *Vigna unguiculata*, environmental stress, relationship, electrolyte balance 2993.
pathogens, pest control, biological control, *Insecta* 990.
pest control, biological control, *Nematocera* 1016.
pest control, dispersal, *Arthropoda*, 989.
plant diseases, books 9094.
plant diseases, conferences 7280.
plant diseases, conferences, books 2728.
plant diseases, disease control, repellents, *Myzus persicae* 459.
plant diseases, disease spread, agricultural practices, reviews 2978.
plant diseases, disease transmission, *Aphididae* 1122.
plant diseases, *Physalis curassavica*, susceptibility 3083.
plant diseases, *Spermatophyta*, pathology, books 8178.
plant diseases, vectors, *Insecta* 1120.
plants, antigenic variants detection, enzyme-linked immunosorbent assay 1757.
plants, detection, enzyme-linked immunosorbent assay, sensitivity 3530.
plants, detection, identification, immunoelectron microscopy use 4926.
plants, disease transmission, *Nematoda*, association feeding behavior 1121.
proteins, radioactive labelling methodology 1761.
proteins, spectrophotometry, solvents, methodology 8108.
radiation, inactivation, laboratory effluents 790.
recovery, drinking water, sewage, surface charge, filters 8096.
reduction, composting, sewage sludge 8938.
replication, inhibitors, plants 3156.
replication, nucleosides analogs inhibition 3352.
reservoirs, *Fragaria ananassa* disease control relationship, *Nematoda* 13.
seed-borne diseases, pest control 9479.
seed-borne diseases, pathogenesis 2973.
seed-borne diseases, quality control assays 2968.
sewage sludge, public health, man 7192.
spot, Gramineae, symptoms, vectors, biological properties 1163.

Viruses, (continued)

surface water contamination, German Dem. Rep. 3477.
tomato bushy stunt virus like, identification, *Solanum melongena* isolates 8588.
transfer, *Chlamydia psittaci* culture 9015.
vaccines, genetic engineering 3453.
vaccines production 5282.
vaccines, production, genetic engineering 3452.
water-borne diseases, man, drinking water 2633.
water-borne diseases, recreation sites, wastewater treatment effects on 9810.

Vinea virus,

antibodies, detection, enzyme-linked immunosorbent assay, sheep, goats 2651.

Visual perception,

man, pathogenesis, leafspot, *Dactylis glomerata*, *Stagonospora arenaria* 3101.

Vitamins,

biosynthesis, *Pseudomonas thermophila* 1978.
effects on valine production, *Micrococcus varians* 7286.
milk, effects on vitamins 4854.
nutrition, animals, interaction aflatoxicosis 4899.
starter cultures, yogurt 7591.

Vitis,

grapevine yellow speckle disease, disease transmission 3070.

Vitis labrusca,

peach rosette mosaic virus infection, disease control, vectors, *Xiphinema americanum* 5842.

Vitis vinifera,

alfalfa mosaic virus infection 3068
buds, poultry mildew overwintering 1270.
closterovirus, leaf-roll 3073.
dieback, disease control, use, benomyl, USA, Michigan 6881.
disease resistance, powdery mildew, cultural conditions 2250.
disease resistance, tomato ringspot virus infection 5054.
diseases, fungi, characterization 5026.
Eutypa americana infection, isolation, identification 1299.
fruit+ mildew disease resistance, nitrogen metabolism 7688.
fruit rot, *Botrytis cinerea*, dicarboxamides disease control 8639.
fruits, aromatic compounds production, role grey mold, *Botrytis cinerea*,
host-parasite interactions, ultrastructure 9402.
fruits, *Botrytis cinerea* rot, agricultural practices effects on pathogenicity,
USA, California 7685.
Gliomus fasciculatus symbiosis, relationship, hyphae structure, biochemical
characteristics 4183.
grapevine Bulgarian latent virus infection, symptoms, electron microscopy 3080.
grapevine fanleaf virus 1287.
grapevine fanleaf virus, detection, enzyme-linked immunosorbent assay 2160.
grapevine fanleaf virus infection, detection, enzyme-linked immunosorbent assay
1240.
grapevine fanleaf virus infection, disease control, *Nematoda* vectors 4131.
grapevine leaf roll virus detection 3072.
grapevine leaf roll virus infection, ribavirin effects on pathogenesis 5066.
Gymnosporangium fuscum, haustoria penetration 1284.
heat treatments, disease control, grapevine fanleaf virus, grapevine leaf roll
virus, grapevine vein banding virus 2245.
leaf-roll, pathogenesis, ultrastructure, virus-like particles 5782.
leaves, grapevine fanleaf virus mixed infection 5784.
mixed infection, alfalfa mosaic virus, ± grapevine fanleaf virus, ±
strawberry latent ringspot virus 2178.
nepovirus elimination, meristem tip culture 3134.
parasitism, *Cuscuta campestris*, disease transmission, grapevine fleck virus,
grapevine yellow vein virus, grapevine leaf roll virus 6794.
Pierce's disease, gram-negative bacteria, pathology 3056.
Pierce's disease, pathogenesis 5027.
plant diseases, viruses, identification 1283.
Plasmopara viticola, downy mildew, fungicides resistance, measuring techniques
7890.
sap, galls, isolation, *Agrobacterium tumefaciens*, pathogenicity 5744.
stems, oxidation pretreatment, biodegradation rumen microorganisms 2009.
stunt, relationship, methyl bromide soil fumigation effects on mycorrhizas 5987.
tissue culture, growth *Plasmopara viticola*, downy mildew 1289.
vascular system, *Verticillium dahliae* infection, isolation 9406.
viruses infection, isolation methodology 4019.
viruses leafroll, cytopathology, histopathology 429.
yellows, isolation, mycoplasma-like organisms 5024.

Volcanic ash,

soil, stabilization, microorganisms, biodegradation, straw, role 5091.

Volcanoes,

USA, Washington, environmental impact, effects on nitrogen cycle, USA,
Washington, bacteria 5122.

Volume,

yeasts, association, sediments, suspensions, measuring techniques 9089.

Volutella volucae,

cultivation, technology, species use, USA, reviews 4825.
nucleic acids levels, mushroom poisoning relationship 1961.

Vomitoxin,

distribution, *Triticum*, *Gibberella zeae* infection 8546.

Vorian,

treatment, pythium infection, Gramineae 4114.

Vortex,

treatment, *Phellinus weirii* infection, *Pseudotsuga menziesii* 545.

soil fumigation, *Fusarium oxysporum* f.sp.melonis invasion 5989.

Washingtonia,

buds rot 1256.

Waste disposal,

Egypt, composts 2604.
hospitals wastes, hygiene, infectious diseases 799.
landfills, methanogenesis 4263.
oil, biodegradation, soil properties 7020.
sewage effluents, estuaries, effects on viruses levels 1704.

Waste disposal sites,

British Isles, anaerobic bacteria phenol biodegradation 3799.
composts, levels, gram-negative bacteria, *Aspergillus fumigatus*, endotoxins 5292.
enterovirus movement, aquifers 5328.
sewage, fecal coliforms, ground water movement 9814.

Waste treatment,

activated sludge, oxidation, sedimentation, effects on 1703.
animal wastes, lagoons, bacteria population dynamics 444.
animal wastes, microorganisms association biodegradation 2616.
bioreactors, digestion (anaerobic), methodology, characterization 8928.
coffee fermentation, fungi 4432.
composting, association, physicochemical properties, reviews 7191.
ethanol fermentation wastes, by-products recovery 9803.
fisheries, bioreactors 8930.
methodology, removal, bacteria, pollution indicators 2610.
overload, effects on, bioreactors 8929.
sewage sludge, digestion (aerobic), thermophilic microorganisms 8939.

Waste water,

acids, digestion (anaerobic) 2603.
association, bacteria indicator species 797.
coal, bacteria, drainage systems, sodium lauryl sulfate, sodium benzoate,
inhibition 8713.
contamination, *Bacillus subtilis*, U.V. radiation disinfection 3472.
digestion (anaerobic), technology, reviews 9801.
disinfection, microbiology, methodology, bibliographies 1698.
films, formation, structure, electron microscopy 7193.
industries, phosphorus treatment, nitrogen removal 5319.
infection, phages, concentration, methodology 2654.
mines, rivers contamination, temperature effects on bacteria iron oxidation 5134.
olives food processing, association, *Saccharomyces lipolytica* single-cell protein
production 8212.
oxidation, industrial wastes, paints processes 5318.
ozone, disinfection 5293.
ozone, disinfection 5297.
soil amendment, agricultural practices, microbiology, bibliographies 2607.
viruses isolation, incidence, survival association, wastewater treatment 1766.

Waste water treatment,

cell aggregation, aquatic microorganisms, role extracellular polymers 8059.

Wastes,

cellulase conversion, bioreactors, *Trichoderma viride* enzymatic activity 9172.
chemicals, activated sludge treatment, bioreactors 9804.
Citrus, use, *Sporotrichum pulverulentum*, proteins, production 9131.
composting, C/N ratios association 4448.
ethanol fermentation, by-products recovery 9803.
food, *Lactobacillus acidophilus*, *Saccharomyces cerevisiae*, fermentation,
antiviral activity 7595.
hospitals, waste disposal, hygiene, infectious diseases 799.
microorganisms biomass, quantification, radium adsorption 9828.
pigs, biodegradation, aerobic bacteria, heat output 2888.
pigs, *Sporotrichum pulverulentum* biomass production 9102.
use, production, *Candida*, single-cell protein, ethanol, books 10000.
wastewater, distilleries, fungi mixed culture, protein biosynthesis 15.

Wastewater treatment,

activated carbon filters, bacteria, organic compounds decomposition 8956.
activated sludge 5307.
activated sludge, aeration tanks activity 8965.
activated sludge bacteria, heavy metals tolerance, copper bioaccumulation 6246.
activated sludge, ferric chloride effects on 4441.
activated sludge, pesticides effects on 6240.
activated sludge quantification 6256.
activated sludge, sampling methodology, viruses detection 6251.
aeration tanks, oxygen absorption 4437.
aeration tanks, oxygenation effects on activated sludge 789.
association, filamentous bacteria development, relationship, activated sludge
feeding patterns 3476.
bacteria, metals uptake 5313.
biodegradation, aromatic compounds ozonation effects on 5294.
biofilms, bacteria, population studies 5300.
coal gases, filters, anaerobic microorganisms 8952.
coffee fermentation, fungi 4432.
conferences, books 9097.
2,4-D biodegradation, glucose association, microorganisms 9266.
dairies, capacity, milk 1701.
denitrification 4447.
denitrification, bacteria 5326.
denitrification, *Thiobacillus denitrificans*, kinetics 6243.
digestion (anaerobic), bioreactors 8960.
digestion (anaerobic), digestion (aerobic), bacteria, survival, association,
temperature 2613.
digestion (anaerobic), industrial effluents, molasses 4445.
disinfection 8926.
distilleries, *Malus pumila*, *Aspergillus niger* 8054.
Enterobacteriaceae, antibiotic resistance, transfer, R factors 1548.
facultative bacteria, ammonia, nitrogen, removal 5331.
films, effects on, filters, pressure 4443.
filters, poliovirus adsorption, salts effects on 3469.
floculants size reduction 9806.
indicator species, aerosols, coliforms, Cyanophyta phages 8796.
industrial effluents, breweries, pH effects on 4438.
industrial effluents, dairy industry, bibliographies 1695.
industrial effluents, fermentation, bibliographies 1694.
industrial effluents, oil, digestion (anaerobic) 5305.
industrial effluents, pulp mills, environmental effects, bibliographies 2608.
industrial effluents, pulp mills, fungi 6245.
industrial effluents, purification, *Pseudomonas*, *Bacillus* 793.
industrial effluents, textile industry, bibliographies 1696.
industrial wastes, water pollution, microbiology 5317.
membrane filtration fouling organisms, bacteria, films characterization 3465.

Warburgia,

sesquiterpenes, antifungal activity, *Saccharomyces cerevisiae* 8791.

Wart disease,

Solanum tuberosum, epidemiology, pathogenesis, *Synchytrium endobioticum* 8535.

Washing,

bottles 4874.

Waters,

carrots, effects on microorganisms 5613.
hand, effects on shigellosis disease spread, man, Bangladesh 5356.
hospitals laundry, water temperature effects on bacteria 3498.
sheep, goats, carcasses, chlorine 6684.
teats, effects on bacteria contamination, milk, cattle 5350.

Wastewater treatment, (continued)

methanogenesis, films, digestion (anaerobic) 8957.
 methodology, cost-benefit analysis 5320.
 microbial pollution, counting methods 3466.
 microbiology, bibliographies 5309.
 microorganisms anaerobic respiration 5311.
 mixed culture, *Scenedesmus*, oscillatoria, bacteria, phosphorus removal 2615.
 models, aerobic conditions 788.
 nitrification 5286.
 nitrifying bacteria, denitrification, factors affecting 9797.
 nitrifying bacteria, dissolved oxygen effects on continuous culture reactors 1705.
 nitrogen removal, books 9995.
 nutrients removal, relationship, algae, plants growth 5329.
Oryza sativa, films, formation, role, filtration 4444.
 oxidation, books 9092.
 oxygen, uptake 4436.
 ozonation, microorganisms disinfection 5324.
 petroleum oil and gas industry 6250.
 reactors, biological oxygen demand, microorganisms 5310.
 reactors, mathematical models 1686.
 recreation, sites, water-borne diseases, viruses, effects on 9810.
 relationship, temperature, pollutants, microorganisms 5330.
Salmonella typhimurium viability 6244.
 sewage sludge, digestion (anaerobic) 8055.
 sludge disinfection, pathogens 9605.
 steel industries, activated sludge 5306.
 trickling filters, microorganisms 5295.
 use, microorganisms 8958.
 viruses, cytotoxicity, reduction, sewage sludge 8950.
 viruses survival association 1766.
 water quality, microbiology, environmental effects, bibliographies 2606.
 why use, microorganisms anaerobic respiration 5325.

Water
 bakery products, yeasts, food contamination, effects on antimicrobial agents 240.
 chlorination, meat contamination prevention 7611.
 Chromobacterium isolation, food, soil 2041.
 contamination, public health, man 5285.
 content, soil, effects on acetylene reduction conversion factors, comparison, nitrogen fixation 705.
 disinfection, bacteria contamination, cleaning systems, milking machines 5342.
 effects on *Bacillus thuringiensis* subsp. *israelensis* spores viability, biological control, *Aedes aegypti* 4713.
 effects on, benzylpenicillin production 7148.
 enterovirus contamination, filtration methodology 3520.
 microorganisms, pollution, ecology 1713.
 organic compounds removal, microorganisms + activated carbon 6255.
Oryza sativa irrigated areas, survival, *Colletotrichum gloeosporioides* f.sp. *aeshynomene* 1189.
 phases isolation methodology, reviews 2649.
Prunus cerasus, *Coccomyces himalis* infection, effects on pathogenesis 1203.
 quality control, microbial pollution 4452.
 soil, association, *Gaeumannomyces graminis* var. *tritici* take-all, *Triticum* 491.
 sources, association, bacteria indicator species 797.
 sprays, use, disinfection, dentistry equipment, bacteria 5335.
 sterilization, U.V. radiation, effects on bacteria 4325.
 toxicity testing, bioassays, luminous bacteria 3572.

Water activity
 bacteria, spoilage, frankfurters 8667.
 effects on, *Prunus amygdalis*, fungal flora, seed composition 5803.
Erwinia chrysanthemi, relationship pectate lyase biosynthesis 9185.
 growth, *Salmonella typhimurium*, *Staphylococcus aureus*, food, mathematical models 8468.
 media (culture), liquid culture 3515.
Staphylococcus aureus growth, media solutes 864.

Water content
 association, fluorescence, corn aflatoxins contamination, assays, USA, South Carolina 9291.
 cheese, starter cultures, *Streptococcus thermophilus*, acid production 8462.
 effects on fungi decomposition, wood, *Fagus sylvatica* 9530.
 food, microbiology, methodology 4831.
 substrates, effects on *Eucalyptus* leaf litter biodegradation 153.

Water flow
 roots, gossypium hirsutum, wilt, *Phymatotrichum omnivorum*, effects on 4039.

Water hardness
 effects on nitritriacetic acid biodegradation, activated sludge 2611.
 effects on nitritriacetic acid biodegradation, activated sludge 2612.

Water pollution
 effects on fungi fungi 8977.
 industrial wastes, wastewater treatment, microbiology 5317.
 Iran, pollution indicators, *Pisces* intestinal microflora bacteria 1725.
 microbial contamination, *Pisces* infection, epidemiology, infection, man 6266.
 microbial contamination, pollution detection methodology, fecal microflora, membrane filtration 2626.
 microbial pollution, feces, Brazil 8971.
 microbial pollution, pollution detection, enterovirus, *Perna canaliculus* 3516.
 phytoplankton, aquaculture, association, *Crassostrea gigas*, food contamination 2924.
 sewage outfalls, sediments, enterovirus, *Streptococcus*, coliforms 796.
 toxicity testing, bacteria 6241.

Water potential
 effects on pathogenicity, *Fusarium culmorum* infection, *Triticum* 1149.
Pisolithus tinctorius, seedlings, *Quercus velutina* 9508.
 soil, effects on, *Phytophthora parasitica* var. *nicotiana*, infection, *Nicotiana glauca* 9393.
 soil, growth, *Pythium ultimum*, population dynamics 4228.

Water purification
 methodology, microorganisms 1714.

Water quality
 bacteria contamination, association otitis externa, epidemiology, man 2630.
 bioassays, reviews 2602.
 microbial pollution, pollution levels 1721.
 surface water, streams, environmental impact, cattle, grazing, USA, Colorado 8973.
 wastewater treatment, microbiology, environmental effects, bibliographies 2606.

Water relations
Phytophthora cinnamomi infection, *Isoetes* ceratophyllus, *Eucalyptus macrorhyncha*, *Eucalyptus goniochaeta* 3982.
Pisolithus tinctorius, seedlings, *Quercus velutina* 9508.

Water resources
 man, feces bacteria quantification 5322.

Water salinity
 effects on microorganisms biodegradation pollutants, aquatic environment 2876.

Water sampling
 indicator species, bacteria, enumeration, light effects on 2625.

Water springs
 bacteria analysis 9815.

Water stress
Arachis hypogaea, effects on *Aspergillus flavus* infection 5664.
 effects on, nitrogen fixation, *Medicago sativa* 4234.
 effects on, nitrogen fixation, nodules respiration, *Glycine max* 1499.
 powdery mildew, *Erysiphe graminis* f.sp. *hordei*, roots growth, *Hordeum vulgare* 3935.
Zea mays, effects on *Aspergillus flavus* infection 5664.

Water supplies
 coliforms contamination, waterborne diseases epidemiology 8967.
 Germany, Fed. Rep., bacteria levels 1716.
 hospitals, contamination, *Legionella pneumophila* 1719.
 industries, bacteria biodegradation, conferences 4756.
 microbial pollution, water-borne diseases, epidemics, indicator species, books 9999.
 wells, microbial pollution, Ivory Coast 3486.

Water temperature
 dishwashers, chlorine disinfection 4458.
 dishwashers, hygiene, disinfection 4455.
 hospitals laundry, washing, effects on bacteria 3498.
 hot, relationship *Legionella pneumophila* colonization, hospitals 8972.

Water treatment
 bacteria, flocculation 9800.
 bacteria growth, association carbon 8069.
 fluoride, fluorosis, dental canines, children 8077.
 poly(N-benzyl-4-vinylpyridinium bromide), removal, bacteria, methodology 9046.

Water uptake
 analysis, dry matter, bacteria biomass determination 8129.
Citrus jambhiri, vesicular-arbuscular mycorrhizas, *Glomus intraradices*, effects on 4135.

Water-borne diseases
 bacteria, pathogens, man, incidence, detection 2640.
 drinking water, man, bacteria, viruses 2633.
 gastroenteritis, man, Norwalk agent infection, association swimming, epidemiology 709.
 microbial pollution, epidemics, indicator species, water supplies, books 9999.
Pseudomonas aeruginosa, otitis externa, man, baths 8070.
 viruses, recreation sites, wastewater treatment effects on 9810.

epidemiology, coliforms contamination, water supplies 8967.

Waterborne disease
Erwinia salicis, antigens detection, enzyme-linked immunosorbent assay, *Salix alba* 6919.

Watermelon mosaic virus
 disease resistance, relationship papaya ringspot virus disease resistance, genetic analysis, *Cucumis melo* 5778.
 disease transmission, vectors, Aphididae 4986.
 infection, *Cucurbita*, characterization 4984.
 infection, *Cucurbita maxima*, effects on enzymes activity 9434.
 infection, *Cucurbita pepo*, incidence, prophylaxis, economic importance, Jordan 1317.

Watermelon mosaic virus 2
 host range, vectors, Jordan 1247.

Wavelength
 light, effects on nodulation, nitrogen fixation, growth, *Trifolium repens* 9589.

Waxes
 coatings, plant protection, fungi infection, *Sorghum bicolor*, *Zea mays*, *Triticum aestivum* 4071.
 esters, production, *Acinetobacter* 2841.

Weather
 effects on soil microorganisms 5924.

effects on aflatoxins food contamination, pecans, USA 6672.
 effects on, fungicides, use, prediction, late blight, *Phytophthora infestans*, *Solanum tuberosum* 8622.
 epidemiology, downy mildew, *Pseudoperonospora humuli*, *Humulus humuli* 3087.
 relationship, *Botrytis squamosa* conidia release, *Allium cepa* blight 5771.
 relationship, incidence, *Puccinia polysora* rust, *Zea mays*, USA, Indiana 6765.
 satellites, monitoring rust disease spread, *Gramineae* 1166.
 USA, Kentucky, relationship, *Phomopsis* infection, *Glycine max* seeds 6734.

Web blight
Rhizoctonia solani, benomyl disease control, *Glycine max* 5059.
Rhizoctonia solani, mulches disease control, *Phaseolus vulgaris* 5050.
Thanatephora cucumeris, *Phaseolus vulgaris*, epidemiology, Costa Rica 9325.

Weed control
Aeschynomene virginica, *Oryza sativa*, biological control, *Colletotrichum gloeosporioides* f.sp. *aeschynomene* 6630.
Alternaria cassiae, seedling blight, *Cassia obtusifolia*, *Cassia occidentalis*, *Crotalaria spectabilis* 1286.
 biological control, *Colletotrichum gloeosporioides*, *Hakea sericea*, field trials 9408.
 biological control, *Colletotrichum malvarum*, *Sida spinosa* 1285.
 biological control, pathogens, books 8183.
 biological control, plant diseases, pathogens, developing countries 7472.
Convolvulus curvatus, biological control, fungi, surveys 414.
Kuehneola uredinis leaf rust, *Rubus*, biological control, USA, Hawaii 9410.

Weeds
 association *Hydrangea macrophylla*, tomato spotted wilt virus detection 5016.
Convolvulus, roots, susceptibility, fungi infection 9394.
 infection, association, distribution, tobacco rattle virus, potato virus X 1244.

Well-Felix test
 scrub typhus, diagnosis, man 9964.

Welfare
 biodegradation, fish products preservation 2045.

- Wells**,
bacteria, microbial pollution 2623.
iron-oxidizing bacteria contamination 3483.
microbial pollution, Ivory Coast 3486.
microbial pollution, public health, man, coliforms, Nigeria 8067.
sulfate-reducing bacteria contamination, ground water, sulfate-reducing bacteria contamination 3488.
- Wet bubble disease**,
Mycogone permixosa, prochloraz, disease control, Basidiomycetes 6824.
- Wetlands**,
pasture, soil microorganisms, biochemical characteristics, soils (loam) 2337.
- Wetwood**,
Alnus concolor, inhibition, Heterobasidion annosum 9517.
bacteria, *Abies* 5923.
bacteria, gas production, *Ulmus americana* 2323.
Ulmus americana, etiology, bacteria species 8657.
- Wheat**,
gluten, storage conditions, biodegradation, microorganisms 2915.
lysine, + microorganisms production lysine, nutritive value, rats 5632.
Fenestillum verrucosum var. *cyclopoid*, ochratoxin A biosynthesis 2062.
post-harvest decay, fungi, factors affecting 4054.
post-harvest decay, preservatives antifungal activity 441.
storage, food contamination, *Aspergillus* 443.
- Wheat dwarf virus**,
infection, Gramineae 2120.
- Wheat mosaic virus**,
infection, *Triticum aestivum*, disease resistance, genetic analysis 2240.
infection, *Triticum aestivum*, soil fumigation effects on 9439.
structural proteins, molecular weight, infection, cytology, *Triticum aestivum*,
Panicum miliaceum 2117.
vectors, *Polymyxa graminis* ultrastructure, *Triticum aestivum* soil-borne diseases 363.
- Wheat spindle streak mosaic virus**,
infection, *Triticum aestivum*, detection, immunoelectron microscopy 9353.
- Wheat streak mosaic virus**,
detection, immunodiffusion, enzyme-linked immunosorbent assay, *Triticum aestivum* 6757.
Triticum aestivum, infection, association, protein composition 6779.
- Whey**,
Bifidobacterium lactofermentum, *Escherichia coli*, amino acids production 3655.
2,3-butyleneglycol production, *Bacillus polymyxa*, *Streptococcus faecalis* 1040.
cheese, conversion, single-cell protein production, yeasts 9286.
cheese, digestion (anaerobic), chemicals flocculants effects on 9809.
cheese, trace elements effects on *Candida intermedia* 3817.
ethanol production, microorganisms 3762.
fermentation, *Aspergillus niger*, citric acid production 8196.
fermenters, fungal flora 3644.
lactose hydrolysis, β -D-galactosidase 8471.
media (culture), *Lactobacillus acidophilus* 8146.
production, single cell protein, ethanol, *Kluyveromyces fragilis*, *Kluyveromyces fragilis* 4732.
proteins, effects on yogurt, *Streptococcus thermophilus*, *Lactobacillus helveticus* 4913.
soybean milk, carbon sources, *Propionibacterium freudenreichii* subsp. *shermanii*,
cyanocobalamin production 5565.
Streptococcus phages, viability 4806.
use, wastewater treatment, microorganisms anaerobic respiration 5325.
utilization, *Candida pseudotropicalis*, production, biomass, β -D-galactosidase 6307.
- Whiskey**,
distilleries wastes, fungi mixed culture, protein biosynthesis 15.
- White clover mosaic virus**,
strains, physicochemical properties, host range 2995.
Trifolium pratense, Trifolium repens, disease resistance 331.
- White leaf disease**,
cucumber mosaic virus, RNA, relationship, infectivity, *Lycopersicon esculentum* 2135.
cucumber dactylon, tamulin treatment 510.
Lycopersicon esculentum, role, cucumber mosaic virus, satellite RNA 1292.
virus-like particles, etiology, *Oryza sativa* 8556.
- White mold**,
Erysiphe chichoracearum, disease resistance, *Nicotiana tabacum* 4091.
Nicotiana tabacum, disease resistance, *Erysiphe chichoracearum* 4074.
Sclerotinia sclerotiorum, disease resistance, plant breeding, Phaseolus 1365.
Sclerotinia sclerotiorum, Phaseolus, USA 4940.
- White rot**,
Allium cepa, seed treatments, biological control, *Bacillus subtilis* +
fungicides 4103.
Allium cepa, seeds + radiation effects on incidence 1429.
Aspergillus dothidea, pathogenicity, *Malus pumila* 5736.
Coriaria versicolor, pruning wounds, disease control, fungicides, *Malus pumila* 6873.
development, *Botryosphaeria dothidea*, *Malus*, association, fructose content, pH 4975.
disease control, *Bacillus subtilis* seed treatments, *Allium cepa* 5848.
Inonotus dryophilus, decay association, *Quercus alba*, *Quercus macrocarpa* 5880.
leaf litter decomposition, *Abies alba* 6906.
Sclerotium cepivorum, *Allium*, *Bacillus subtilis*, use, biological control 6592.
Sclerotium cepivorum, *Allium*, disease control, vapon 9492.
Sclerotium cepivorum, lipid composition, *Allium cepa* 5756.
Sclerotium cepivorum, lipid composition, carbohydrate composition, organic acids composition, *Allium cepa* 5760.
Sclerotium cepivorum, pathology, disease control, *Allium cepa*, reviews 1260.
wood supports, coal mines 6934.
- White rust**,
resistance, Brassica juncea, phenols, sugars concentration 5769.
Spinacea oleracea disease control, metalaxyl + chlorothalonil treatment 5064.
- Wildfire**,
Nicotiana glauca, disease resistance, plant breeding 1339.
- Wilt**,
Arachis hypogaea, Verticillium, Bremia sodium disease control 1411.
Bursaphelenchus xylophilus, Pinus, disease control, pesticides uptake 5877.
Chrysanthemum morifolium disease resistance, *Fusarium oxysporum* f.sp. *chrysanthemi* inoculation 4999.
Cocos nucifera 7681.
Cocos nucifera, pathogenesis, mycoplasma-like organisms 8567.
- Wilt, (continued)**
Cocos nucifera roots, pathogenesis 1227.
Corynebacterium insidiosum, amino acids metabolism, Medicago sativa 3010.
Corynebacterium insidiosum, Verticillium albo-atrum, disease resistance assays, Medicago sativa 4063.
Cucumis melo, *Fusarium oxysporum*, symptoms 2214.
Cucumis sativus, disease resistance, pathogens induction 2262.
Cuminum cyminum, etiology, *Fusarium equiseti* 1300.
Cyphomandra belaeza, disease resistance 1384.
Erwinia stewartii, disease resistance, plant breeding, Zea mays 1346.
Exacum affine, Nectria haematococca infection 1262.
Fusarium, *Lycopersicon esculentum*, Citrullus vulgaris, disease control, use, antagonists 1354.
Fusarium oxysporum infection, disease resistance, screening, Glycine max 1372.
Fusarium oxysporum f.sp. *chrysanthemi*, *Fusarium oxysporum* f.sp. *ini*, media (culture), organic compounds, effects on 4040.
Fusarium oxysporum f.sp. *chrysanthemi*, inoculation, pathogenesis, Chrysanthemum morifolium 5764.
Fusarium oxysporum f.sp. *ciceri*, asymptomatic infection, Cajanus cajan, Lens esculentus, Pisum sativum 4938.
Fusarium oxysporum f.sp. *ciceri*, disease resistance, inheritance, Cicer arietinum 4062.
Fusarium oxysporum f.sp. *cucumerinum*, *Cucumis sativus*, disease resistance induction 465.
Fusarium oxysporum f.sp. *cucumerinum*, *Cucumis sativus*, incidence 9415.
Fusarium oxysporum f.sp. *fatshederae*, Fatshedera lizei 6802.
Fusarium oxysporum f.sp. *gladioli*, symptoms, chemical control, Gladiolus 3995.
Fusarium oxysporum f.sp. *lupini*, disease resistance, Lupinus albus 9461.
Fusarium oxysporum f.sp. *lycopersici*, cytopathology, *Lycopersicon esculentum* 3088.
Fusarium oxysporum f.sp. *lycopersici*, integrated control, nitrate + calcium oxide + benomyl, *Lycopersicon esculentum* 4107.
Fusarium oxysporum f.sp. *lycopersici*, integrated control, benomyl + nitrate + calcium oxide, *Lycopersicon esculentum* 4108.
Fusarium oxysporum f.sp. *lycopersici*, interaction Meloidogyne javanica, *Lycopersicon esculentum* 3990.
Fusarium oxysporum f.sp. *lycopersici*, *Lycopersicon esculentum*, nitrogen nutrition effects on 411.
Fusarium oxysporum f.sp. *medicaginis*, soil moisture, effects on, disease resistance, Medicago sativa 4057.
Fusarium oxysporum f.sp. *medicaginis*, virulence, disease resistance, Medicago sativa 3014.
Fusarium oxysporum f.sp. *niveum*, inoculum, effects on, disease resistance, Citrullus lanatus 5774.
Fusarium oxysporum f.sp. *pisi*, interspecific interactions Pratylenchus penetrans, Pisum sativum 1133.
Fusarium oxysporum f.sp. *pisi*, Pisum sativum, disease resistance, electrophoresis 4063.
Fusarium oxysporum f.sp. *vasinfectum*, *Abelmoschus esculentus*, disease resistance 7740.
Fusarium oxysporum f.sp. *vasinfectum*, *Gossypium hirsutum*, side-effects, herbicides 3145.
Fusarium oxysporum f.sp. *vasinfectum*, solar radiation, soil temperature, effects on, *Gossypium barbadense*, *Gossypium hirsutum*, yield 8606.
Fusarium oxysporum f.sp. *vasinfectum* + Meloidogyne incognita acrita infection, disease resistance, *Gossypium hirsutum* 7732.
Fusarium solani, Pisum 329.
Fusarium udum, disease resistance, screening, Cajanus cajan 1367.
Fusarium udum, disease transmission, Isoptera, Cajanus cajan 2987.
Fusarium, Verticillium dahliae, interaction, Erwinia carotovora, black leg, effects on, Solanum tuberosum 1251.
Gossypium, association melanins deficient mutant, complementation genetic analysis, gene mapping, Verticillium dahliae 6796.
Gossypium barbadense, *Fusarium oxysporum* f.sp. *vasinfectum*, dispersal, Israel 6817.
Gossypium hirsutum, mathematical models, plants growth relationship 2134.
Gossypium hirsutum seeds, *Fusarium oxysporum* f.sp. *vasinfectum*, pathogenesis 4991.
Gramineae, bacteria pathogenicspecificity 359.
Lotus corniculatus, Pseudomonas viridiflava 6744.
Lycopersicon esculentum, disease resistance 1380.
Lycopersicon esculentum, etiology 1257.
Lycopersicon esculentum, Pseudomonas solanacearum, grafting, disease resistance 3130.
Lycopersicon esculentum, Pseudomonas solanacearum survival, USA, North Carolina soil 8675.
Medicago sativa, disease resistance, inheritance 6862.
Momordica charantia, pathogenicity, *Fusarium oxysporum* f.sp. *momordicae* 3093.
phymatrichum omnivorum, effects on, *Gossypium hirsutum*, roots, water flow 4035.
Phytophthora drechleri, Cucurbita, Cucumis 1210.
Pierce's disease bacteria, seedling, Citrus jambhiri 392.
Pseudomonas solanacearum, disease resistance, Solanum tuberosum, biological control 5833.
Pseudomonas solanacearum, hypersensitive response, agglutinins, Solanum tuberosum 3127.
Pseudomonas solanacearum, *Lycopersicon pimpinellifolium*, disease resistance 6791.
Pseudomonas solanacearum, vertical distribution, soil, *Lycopersicon esculentum* 5759.
Pseudomonas solanacearum, Xanthomonas campestris pv. *pelargonii*, susceptibility, Pelargonium hortorum 5012.
Quercus, epidemiology, disease spread 1462.
Rhizoctonia solani, Verticillium albo-atrum, rhizosphere microorganisms, Solanum tuberosum, insecticides effects on 1512.
shoots, Erwinia amylovora amylovorum, host specificity, Cotoneaster pannosa, spiraea vanhouttei, *Malus pumila* 9371.
Solanaceae, Pseudomonas solanacearum infection, host range 2232.
Verticillium albo-atrum, defense mechanisms, enzymes, *Lycopersicon esculentum* 4077.
Verticillium albo-atrum, effects on, Spodoptera eridania, growth, feeding, Medicago sativa 4943.
Verticillium albo-atrum, epidemiology, Medicago sativa, USA, Wyoming 2123.
Verticillium albo-atrum, Medicago sativa, India 4941.
Verticillium albo-atrum, pathogenicity, genetic analysis, *Lycopersicon esculentum*, Medicago sativa 3049.
Verticillium dahliae, disease resistance, plant breeding, seedlings, *Lycopersicon esculentum* 5045.
Verticillium dahliae, disease resistance, Solanum melongena cultivars comparison 6853.

Subject Index

Wilt, (continued)

- Verticillium dahliae*, *Fusarium oxysporum* f.sp.vasinfectorum, disease resistance.
- Gossypium 4086.
- Verticillium dahliae*, interaction pectin-degrading bacteria, *Fusarium*, *Amaroria ruficarpa* 1253.
- Verticillium dahliae*, *Lycopersicon esculentum* cultivars, disease resistance 503
- Verticillium dahliae*, proteins lipopolysaccharides complex characterization 1246.
- Verticillium dahliae*, *Talaromyces flavus* biological control, *Solanum melongena* 1390.
- Verticillium*, disease resistance, *Medicago sativa* plant breeding 7869.
- Verticillium*, incidence, *Persia americana*, Chile 5737.
- Verticillium*, *Solanum melongena*, mulches effects on pathogenicity, yield 476.
- Verticillium*, susceptibility, *Gossypium hirsutum*, relationship, radicle exudates, +chilling 4030.
- Xanthomonas oryzae*, soil pH, *Oryza sativa* 8545.

Wine,

- disease spread, *Peronospora tabacina*, spores release, blue mold, *Nicotiana glauca* 4995.
- velocity, effects on, enumeration, airborne microorganisms, fungi 1813.

Wind barriers,

- trees, fungi infection, distribution 4175.

Wine,

- coloration, yeasts new records, chemical properties, mutations effects on 7511.
- fermentation, media (selective), *Saccharomyces cerevisiae* 8403.
- fermentation residues, *Saccharomyces* storage, biomass chemical composition 7512.
- fermentation, role, *Leuconostoc oenos*, *Pediococcus* 3752.
- fermentation, *Saccharomyces cerevisiae*, foaming assays 3752.
- fermentation, *Saccharomyces cerevisiae*, flavors, protein composition 3754.
- fermentation, *Saccharomyces cerevisiae* interaction *Leuconostoc oenos* 4742.
- fermentation, *Saccharomyces oviformis*, *Botrytis cinerea* activators effects on 3760.
- fermentation, *Saccharomyces*, role sterols 4743.
- fermentation sediments, nutrient sources, *Candida*, single-cell protein production 5628.
- fermentation, temperature effects on 7531.
- fermentation, use, cell culture, *Leuconostoc oenos* 4741.
- fermentation, yeasts pure culture, hybridization selection, sulfur dioxide tolerance 147.
- flavor, yeasts alcoholic fermentation, *Banksia integrifolia* berries oils composition effects on 8639.
- food quality, yeasts culture effects on 1050.
- Leuconostoc oenos*, malolactic fermentation, solids effects on 3757.
- microflora, *Saccharomyces cerevisiae* 3758.
- preservatives, use sorbic acid, formation off flavor 7612.
- production, analyzers 9234.
- production, fermentation, bacteria 2053.
- production, fermentation, books 905.
- production, *Saccharomyces cerevisiae* selection association selection 3759.
- production, *Saccharomyces*, characterization 5568.
- production, yeasts, hybridization, pure culture 140.
- pH+ sulfur dioxide, effects on, *Leuconostoc oenos*, fermentation 3761.
- sterilization, dimethyl dicarbonate fungicidal activity, *Saccharomyces cerevisiae* 2668.
- sterilization, filtration, methodology 3861.
- storage, atmospheric conditions, microorganisms growth 4877.
- storage, lactic acid bacteria incidence, ethanol fermentation 9243.
- yeasts fermentation 4733.

Wineries,

- bottles sterilization, microorganisms contamination source 258.

Winegs robertali,

- cheese whey conversion, single-cell protein production 9286.

Wisteria vein mosaic virus,

- infection, cytology, *Pisum sativum* 2164.

Witches' broom,

- Crinipellis perniciosa*, *Theobroma cacao*, histopathology 398.
- mycoplasma-like organisms, incidence, *Cajanus cajan*, USA, Florida, association, rhadovirus infection 4945.
- mycoplasma-like organisms, *Ipomoea batatas*, disease transmission, *Orosium lophophorum* *ryukyensis*, Solomon I. 9424.
- mycoplasma-like organisms, outbreaks, Rosa 5786.

Wolffella succinogenes,

- nitrite reductase (NAD(P)H), purification, characterization 9186.

Wood,

- acids, hydrolysates, ethanol fermentation, *Saccharomyces cerevisiae* 4734.
- biodegradation, biological activity, soil microorganisms, forests, Canada 6893.
- cell walls, biodegradation, bacteria, aquatic environment 8426.
- cellulose biodegradation, fungi effects on cellulolytic microorganisms 2005.
- cellulose hydrolysis, *Trichoderma*, ethanol production, *Zymomonas mobilis*, *Saccharomyces cerevisiae* 3750.
- Chamaecyparis nootkatensis*, decay, *Gloeophyllum trabeum*, *Poria placenta* 3177.
- chromated copper arsenate treatment, fungi biodegradation 3766.
- decay, association, *Tsuga heterophylla*, ectomycorrhizas symbiosis, relationship, survival 3164.
- decay bacteria, nutrient requirements 3782.
- decay, *Basidiomycetes* 3768.
- decay fungi, ecosystem dynamics, forests 8646.
- decay, heart rot, sap rot, oxygen, carbon dioxide effects on 5084.
- decay, C/N ratios, *Picea sitchensis*, *Tsuga heterophylla*, forests 527.
- decay, *Poria placenta*, *Gloeophyllum trabeum*, pick test assays 4182.
- decay, *Poria placenta*, indicators, compression pressure tolerance, *Pseudotsuga densa* 6935.
- decay, role melanins, *Phellinus weirii* 6933.
- decomposition, bacteria, streams sediments 2885.
- decomposition, spatial distribution, cellulolytic microorganisms, stands, *Fagus grandifolia*, *Acer saccharum* 6891.
- dry rot, *Serpula lacrimans* 3172.
- extracts nutrient sources, bacteria growth association 3.
- Fagus sylvatica*, decomposition, fungi, carbon dioxide gas production, gas chromatography 9530.
- fungi infection, burning effects of public health, airborne microorganisms, man 4454.
- hydrolysis, cellulase recycling, reactors 8445.
- hydrolysis, cellulolytic enzymes adsorption, pH effects on 7548.
- Liriodendron tulipifera*, *Pinus*, storage, disease control, sap stain 9529.
- mesquite, *Candida utilis*+*Pseudomonas*, cattle 4866.
- mycorrhizas, biodegradation, use, inoculum, *Tsuga heterophylla* 529.

Wood, (continued)

- Picea engelmannii*, brown rot decay 6936.
 - Pinus*, fungicides disease control, stain 5882.
 - Pinus leucodermis*, *Basidiomycetes*, new records, Yugoslavia 7778.
 - preservatives, soil microorganisms biodegradation, land disposal, reviews 5985.
 - Pseudotsuga menziesii*, antifungal agents fumigants, disease control, post-harvest decay 1468.
 - pulp, hydrolysis, *Trichoderma reesei* cellulase 9256.
 - Quercus*, *Pinus*, extracts, inhibition, *Hyphomycetes*, growth, spore germination 4180.
 - resistance, fungi biodegradation 5591.
 - supports, brown rot, white rot, coal mines 6934.
 - volatiles, decay fungi chemotrophism association 3765.
- Woodchuck hepatitis virus,**
detection, hepatitis B virus antigens, antibodies cross-reactivity use, radioimmunoassay 9861.
- Wool,**
Trichophyton ajelloi, biodegradation, agrochemicals, effects on 5593.
- Wort,**
fermentation, atmospheric pressure effects on, *Saccharomyces cerevisiae* 9229.- fermentation, *Saccharomyces uvarum*, sulfur dioxide formation, dissolved oxygen effects on 7518.
- media (culture), yeasts, fungi 2714.
- nutrient requirements, *Saccharomyces uvarum* brewing, ethanol levels 7516.

Wound healing,
Alternaria solani, temperature, relative humidity, effects on, *Solanum tuberosum* 4003.- Daupey carota, fulcanndiol, 6-methoxymellein, antifungal activity, *Cladosporium cladosporioides* 4070.
- susceptibility, rot, *Erwinia carotovora* subsp.*carotovora*, *Solanum tuberosum* 3062.

Wound infection,
Chondrostereum purpureum, disease control, fungicides+ paints, *Prunus armeniaca*, *Prunus avium* 8629.- fungi, *Picea abies*, disease resistance 4176.
- Penicillium digitatum*, citrus, post-harvest decay resistance 5802.

Wounding,
Echinodontium tinctorium, incidence, *Abies concolor* 546.

Wounds,
Hordeum vulgare, ethylene production, *Drechslera graminea* infection 1183.- pruning, microorganisms disease control, fungicides treatment 7767.

X-Ray crystallography,

- alcoycidine structure 3441.
 - Chalara *microspora* cytochalasin M 1959.
 - glyceraldehyde-3-phosphate dehydrogenase structure, *Bacillus coagulans* 72.
 - inorganic pyrophosphatase, yeasts 47.
 - iron superoxide dismutase quaternary structure, *Escherichia coli* 6537.
 - iron superoxide dismutase quaternary structure, *Pseudomonas ovalis* 6561.
 - mycolidine IV stereochemistry 1652.
 - phospho-2-keto-3-deoxy-gluconate aldolase structure, *Pseudomonas putida* 2791.
 - phosphoribosyl-antranilate isomerase indole-3-glycerol-phosphate synthase, *Escherichia coli* 960.
 - structure, dethio-tetra(methylthio)chetomin, *Chaetomium globosum* 2576.
 - structure, milbemycins 9792.
 - transketolase, *Saccharomyces cerevisiae* 6551.
- X-Ray diffraction,**
pathogenicity, *Hordeum vulgare* powdery mildew 6775.- porins, *Escherichia coli* 6380.

X-Ray scattering,
isoamylase structure, *Pseudomonas* 964.- malate dehydrogenase, *Halobacterium marismortui* 931.
- phosphoglycerate kinase structure, ATP, 3-phosphoglyceric acid binding effects on, yeasts 7356.
- tryptophan synthase, *Escherichia coli* 1865.

Xanthine,

- Streptomyces viridiviolaceus*, utilization, biodegradation 5602.

Xanthine oxidase,

- association, oxygen, susceptibility, *Legionella pneumophila* 2429.

Xanthine oxidase,

- Enterobacter, phosphorus bioassays 5413.

Xanthium pensylvanicum,

- host plants, *Sclerotinia*, virulence 5753.

Xanthomagnin,

- Penicillium viridicatum*, isolation, purification, high-pressure liquid chromatography 7264.

Xanthomonas,

- plants pathogens, preservation, gels + cold storage 2688.
 - production, deacetylcephalosporin C, isolation 1609.
- Xanthomonas beticola,**
leafspot, *Piper* betle, disease resistance 4023.
- Xanthomonas campestris,**
antibacterial activity, *Gossypium hirsutum* phytoalexins 460.- blight, *Vigna unguiculata* comparison Phaseolus vulgaris, pathogenesis 340.
- carbon sources effects on secretion, polymethyl galacturonase, polygalacturonase, polygalacturonase trans-eliminase 5508.
- disease resistance, leaves, mesophyll, *Citrus sinensis*, *Citrus limonia* 456.
- disease spread, rhizosphere, roots, *Cucumis sativus* 4997.
- infection, *Gossypium hirsutum*, leaves ultrastructure 417.
- infection, *Gossypium hirsutum*, leaves ultrastructure 418.
- infection, Graminae, distribution, Belgium 362.
- infection, Graminae, wilt, pathogenicity, host specificity 359.
- infection, *Piper nigrum* seeds, survival 412.
- leaf blight, etiology, *Zizania aquatica* 5702.
- leaf blight, *Oryza sativa*, phenylalanine ammonia-lyase, tyrosine ammonia-lyase, levels 384.
- leafspot, *Piper nigrum*, relative humidity effects on pathogenicity 410.
- leafspot, susceptibility, magnesium levels, leaves, *Capsicum* 5841.
- media (culture), extracellular polymers, polysaccharides biosynthesis 2682.

Xanthomonas campestris pv. vesicatoria,
copper sensitivity association disease control, spot, *Piper nigrum* 6878.

Xanthomonas campestris pv. arecae,
leaf stripe, *Areca catechu*, epidemiology 8568.

Xanthomonas campestris pv. campestris,
media (isolation), soil 6308.- membrane proteins characterization, taxonomic significance 5471.

- Xanthomonas campestris pv. cerealis**,
leaf blight, etiology, *Zizania aquatica* 5702.
- Xanthomonas campestris pv. citri**,
canker, pathology, *Citrus* 5741.
detection, enzyme-linked immunosorbent assay 5381.
- Xanthomonas campestris pv. cucurbitae**,
leafspot, *Cucumis sativus* 1305.
- Xanthomonas campestris pv. malvacearum**,
blight, *Gossypium hirsutum*, cotyledons, membrane potential, relationship, ATP 3055.
blight, hypersensitive response, *Gossypium hirsutum* 3129.
- Xanthomonas campestris pv. manihoti**,
infection, *Manihot esculenta*, disease resistance 2230.
- Xanthomonas campestris pv. oryzae**,
blight, disease resistance, genes, genetic analysis, *Oryza sativa* 9459.
blight, *Oryza sativa* disease resistance inheritance 9364.
blight, *Oryza sativa*, incidence, Niger 9355.
leaf blight susceptibility, nutrients effects on, *Oryza sativa* 6750.
virulence, blight, *Oryza sativa* 1195.
virulence, *Oryza sativa* blight 352.
- Xanthomonas campestris pv. pelargonii**,
wilt, susceptibility, *Pelargonium hortorum* 5012.
- Xanthomonas campestris pv. phaseoli**,
antibacterial activity, phytoalexins, defense mechanisms, *Phaseolus vulgaris* 1383.
blight, *Phaseolus vulgaris*, disease control 9462.
blight, *Phaseolus vulgaris* disease resistance, tropical environments 5052.
seed-borne diseases, detection, immunofluorescence, *Phaseolus vulgaris* 5800.
- Xanthomonas campestris pv. pruni**,
media (selective) 5398.
- Xanthomonas campestris pv. translucens**,
leaf blight, etiology, *Zizania aquatica* 5702.
- Xanthomonas campestris pv. vesicatoria**,
scab, pathology, *Capsicum annuum* 8575.
spot, *Capsicum annuum* 7696.
leafspot, *Capsicum annuum*, disease resistance 7742.
- Xanthomonas campestris pv. vignicola**,
infection, *Vigna unguiculata*, disease resistance 9471.
isolation, seeds, *Vigna unguiculata* 4944.
- Xanthomonas campestris pv. zizaniae**,
leaf blight, etiology, *Zizania aquatica* 5702.
- Xanthomonas citri**,
immobilized cells, use, cophalexin synthesis 9749.
- Xanthomonas malvacearum**,
blight, disease resistance, genetic analysis, *Gossypium hirsutum* 2254.
- Xanthomonas manihoti**,
blight, *Manihot esculenta*, age effects on incidence, development 4016.
- Xanthomonas oryzae**,
infection, *Oryza sativa*, seed treatments, triphenyltin chloride 2293.
leaf blight, *Oryza sativa*, disease resistance, germplasm analysis 5811.
phytoalexins, purification, effects on, *Oryza sativa*, leaves 7640.
wilt, soil pH, *Oryza sativa* 8545.
- Xanthomonas phaseoli**,
leafspot, bleaching powder, antibacterial activity, *Vigna radiata* 2289.
leafspot, disease control, fungicides, antibiotics, *Vigna radiata* 509.
pathogenicity, *Phaseolus vulgaris*, sulfur dioxide effects on 334.
- Xanthomonas vesicatoria**,
factumycin antibacterial activity 3436.
raoes, pathogenicity, spot, *Capsicum annuum* 1309.
- Xanthotoxin**,
induction, *Petroselinum hortense* cell culture, fungi infection 5765.
- Xenobiotics**,
biodegradation, aquatic environment, microenvironments, microorganisms 4762.
biodegradation, microorganisms, factors affecting 3788.
conversion, microorganisms, models, ecosystem dynamics 6961.
Pseudomonas putida, biodegradation, dehalogenase 2884.
- Xenorhabdus**,
antibiotics activity, Nematoda, bacteria, fungi 3372.
- Xenorhabdus nematophilus**,
antibiotics activity, Nematoda, bacteria, fungi 3372.
- Xeroderma pigmentosum**,
cell lines, methodology, SV40 transformation use 9868.
- Xerophyllum tenax**,
Abies lasiocarpa, habitat, relationship, *Coniarium coleosporioides*, blister 582.
Pinus contorta, USA, Idaho 5862.
- Xerula longipes**,
biosynthesis, streptolurin C, oudemansin B, structure, antifungal activity 8042.
- Xerula melanotricha**,
biosynthesis, streptolurin C, oudemansin B, structure, antifungal activity 8042.
- Xiphias gladius**,
fishery products, packaging, contamination, *Lactobacillus*, *Pseudomonas*, chemistry 4838.
- Xiphinema**,
vectors, tomato ringspot virus necrosis, decline, *Malus domestica* 4978.
- Xiphinema americanum**,
disease transmission, tomato ringspot virus, orchards 2142.
transmission, *Taraxacum officinale*, tomato ringspot virus 8595.
vectors, peach rosette mosaic virus infection, *Vitis labrusca*, disease control 5842.
- Xiphinema diversicaudatum**,
disease transmission, arabis mosaic virus, disease control, fumigation, *Lilium tigrinum* 6871.
- Xiphinema riveai**,
disease transmission, tomato ringspot virus, orchards 2142.
- Xylan**,
biodegradation, *Bacillus*, *Cellulomonas*, *Streptomyces* 1060.
biodegradation, *Bacteroides endo-1,3-β-D-xylanase*, intestinal microflora, man 2022.
Cellulomonas, 1,3-β-D-xylanohydrolase, biodegradation 154.
- Xylanase**,
biosynthesis, *Bacillus*, *Cellulomonas*, *Streptomyces* 1060.
- 1,3-β-D-Xylanohydrolase**,
Cellulomonas, xylan biodegradation 154.
- Xylaria oxycanthae**,
new records, decay, *Crategeus monogyna* fruits 1057.
- Xylem**,
Citrus sinensis, blight, blocking 8565.
dysfunction, *Ulmus americana*, Dutch elm disease, *Ceratocystis ulmi* 8640.
transport, haustoria, *Atkinsonia ligustrina*, host-pathogen interactions, *Loranthaceae* 5790.
- Xylitol**,
bactenostasis, bacteria oral cavity isolates 8782.
chewing gum, dental plaque prevention, man 817.
- D-Xylo-aldonate dehydratase**,
purification, characterization, *Pseudomonas* 6441.
- Xylose**,
fermentation, ethanol biosynthesis, *Pachysolen tannophilus* 135.
metabolism, lactic acid biosynthesis, *Lactobacillus vaccinostercus* sp. nov., calcium alginate immobilized cells 4565.
nitrate, effects on, *Pachysolen tannophilus*, fermentation 7534.
Pachysolen tannophilus, fermentation 7532.
- D-Xylose**,
fermentation, *Candida shehatae*, ethanol production 8407.
- D-Xylose dehydrogenase**,
purification, characterization, *Pseudomonas* 4630.
- Xylose isomerase**,
Arthro bacter, immobilized enzyme, use, feeds syrups production, germanic acid effects on glucose fructose equilibrium 4864.
extraction, methodology comparison, *Streptomyces nigrificans* 3570.
Streptomyces fradiae, *Bacillus subtilis*, immobilization, use, Sepharose-6MB 9147.
- D-Xylose-binding protein**,
purification, characterization, periplasmic space, *Escherichia coli* 6376.
- Yams**,
post-harvest decay, *Botryodiplodia theobroma*, spores, vectors, *Mus musculus* domesticus, *Periplaneta americana*, *Zonocerus variegatus* 442.
- Yarrowia lipolytica**,
petroleum biodegradation, single-cell protein production 5992.
- Yeasts**,
acetyl-CoA carboxylase, purification, characterization 8223.
acidity, heat inactivation, fruit juices 5636.
additives, flavor, champagne 5572.
aeration, fermenters 7519.
alcohol acetyltransferase, use assays, acetyl-CoA 5436.
alcohol dehydrogenase, bioassays, bile acids 4504.
alcohol dehydrogenase, inactivation, NAD⁺ analogs 4627.
alcohol dehydrogenase, zinc binding, polarography 6496.
alcohol dehydrogenase, 3-chloroacetylpyridine-adenine dinucleotide inactivation 934.
alcoholic fermentation, *Banksia integrifolia* berries oils composition, effects on wine flavor 6639.
alcohols production, fermentation 7517.
animal wastes, hydrolysis, products, inhibition, growth 4305.
animals feeds, production, nitrate-reducing bacteria contamination 1085.
antibiotic sensitivity testing 2502.
antifungal activity, *Streptomyces fibriarius* 1,3-dihydroxy-8-decen-5-on 9201.
antimicrobial activity, alkylpyridinium iodides 1587.
antimicrobial activity, roots extracts, *Agrimonia pilosa* 8800.
aspartate aminotransferase, affinity chromatography 1556.
association, damage, crop fields, Aphididae, *Triticum* 3001.
asymmetry hydrolysis, 1-acetoxy-2,3-dichloropropane 158.
batch culture fermenters, dimethyl sulfoxide application 5442.
beer fermentation, dimethyl sulfide role 8405.
biodegradation, aromatic compounds, isolates, mangrove swamps sediments 9253.
biodegradation, hydroquinone 8427.
biomass production, fermenters, pH effects on 4539.
biosynthesis, ethanol, glycerol, sugars fermentation 7525.
brewing, characterization methodology, ethanol fermentation 1049.
carbohydrates digestibility, feeding trials, animals 3853.
carbon dioxide effects on, growth, ethanol fermentation 141.
carboxin resistance 7908.
cell aggregation, flocculation, assays 7263.
cell disruption, methodology glass beads 6337.
cell distribution, methodology 2724.
cell walls, glucans, reviews 1953.
cellobiose fermentation 4744.
cellobiose fermentation, ethanol production 9226.
cellulose decomposition, ethanol fermentation 3753.
cellulose metabolism, ethanol, methane biosynthesis 7510.
champagne fermentation, organoleptic properties, fermenters 7520.
cheese whey conversion, single-cell protein production 9286.
citric acid biosynthesis, carbon sources effects on 7309.
citric acid production, reviews 5470.
clinical isolates, antifungal activity.
1-(4-chlorophenyl)-3,3-dimethyl-2-(1,2,4-triazol-1-yl)methyl-2-butanol 4301.
clinical isolates, blood culture, sucrose effects on detection 9955.
companson, enzymes, electrophoresis 7422.
compounds reduction 7281.
man+animal wastes silage, fermentation, biochemical characteristics 4868.
counting methods, fluorescence, filtration, beer 2869.
counting methods, media (isolation), milk products 4530.
culture collections, storage, nitrogen (liquid) 8150.
culture, effects on alcoholic beverages food quality 1050.
cytosol, mitochondria, isolation methodology 8170.
Daucus carota roots phytoalexins antimicrobial activity 5057.
dental plaque isolates, growth, nutrient requirements, chemostats methodology 4497.
differentiation media 2722.
enolase, substrates binding, metals effects on, N.M.R. 6544.
enzymes, detection, methodology 8168.
enzymes, purification, characterization, books 7275.
ethanol biosynthesis, reactors 139.
ethanol, bread, fermentation 2044.
ethanol fermentation, computer applications 9228.
ethanol fermentation, starch metabolism 5570.
ethanol fermentation technology 142.
ethanol fermentation, *Sorghum bicolor* 4735.
ethanol, *Helianthus tuberosus* carbohydrates 2389.
ethanol production activity 7527.

Yeasts, (continued)

ethanol production, factors affecting 1046.
 extracts, effects on, *Graphium penicillitoides*, biosynthesis, pectate lyase, pectin lyase 5515.
 extracts, inhibition tobacco mosaic virus infection, *Nicotiana glauca*, *Nicotiana glauca* 6887.
 fatty-acid synthetase, interaction rats mammary gland thioesterase 8279.
 feeds additives, chickens 6682.
 feeds, protein composition, association, temperature 1087.
 fermentation, beer, genetic engineering 2859.
 fermentation, beer, reviews 3746.
 fermentation, ethanol, conferences 3640.
 fermentation, ethanol production, analysis methodology 7524.
 fermentation, ethanol production, models, reviews 7522.
 fermentation, ethanol production, parameters 7523.
 fermentation, flavor, beer 2862.
 fermentation, genetic engineering 3744.
 fermentation, genetic engineering 7526.
 fermentation, glucose, analyzers, methodology 4545.
 fermentation induction, factors affecting 8400.
 fermentation, measurements, beer 6636.
 fermentation, phase variations, analysis, spectrometry 5433.
 fermentation, wine 4733.
 food contamination, bakery products, water effects on antimicrobial agents 240.
 food contamination, fruit juices, Venezuela 7574.
 food contamination, ice cream 7587.
 fructose-bisphosphatase, protein kinase phosphorylation, cyclic AMP, fructose-2,6-diphosphate stimulation, AMP inhibition 8263.
 fruit rot, disease control, fungicides, *Ficus carica* 1396.
 β -D-galactosidase, biosynthesis, characterization 950.
 β -D-galactosidase release, solubilization methodology 103.
 genetic engineering, plasmids, methodology 5364.
 glutathione reductase (NAD(P)H), photoaffinity labelling 6500.
 glyceraldehyde-phosphate dehydrogenase, immobilized enzymes, subunits activation, kinetics 4693.
 glyceraldehyde-phosphate dehydrogenase, purification, characterization 4639.
 growth, cold storage temperature effects on, butter 8465.
 growth, contamination, ham, smoking, curing 180.
 growth, lipids biosynthesis, ethanol media 7468.
 guaiacol, veratrole metabolism intermediates, characterization 8439.
 heat inactivation, fruit juices 2039.
 hexokinase, triethyltin bromide inactivation 9149.
 hexokinase, triethyltin bromide inactivation 9173.
 hybridization, pure culture, wine production 140.
 hydrocarbons, gas chromatography, methodology 7271.
 hydroxymethylglutaryl-CoA reductase (NADPH), purification, characterization 8226.
 immobilized cells, carbon dioxide inhibition ethanol production 8397.
 immobilized cells, fermentation, beer 3745.
 immobilized cells, polymers adsorption, ethanol production 7521.
 immobilized enzymes, β -D-fructofuranosidase 46.
 immobilized enzymes, alcohol dehydrogenase activity, bioreactors 7361.
 immobilized enzymes, exo-1,4- α -D-glucosidase, α -amylase, β -D-fructofuranosidase, coupling methods 2765.
 immobilized enzymes, format dehydrogenase 50.
 inoculum, standardization, biochemical oxygen demand determination, organic chemicals 9802.
 inorganic pyrophosphatase, X-ray crystallography 47.
 isolation, soil 5896.
 isolation, trees exudates, identification, host specificity, population dynamics 2295.
 ketone reduction, use, synthesis, synthons 4515.
 lactic acid fermentation, vegetables 5607.
 lactoyl-glutathione lyase, glutathione derivatives inhibition 84.
 lactoyl-glutathione lyase, substrate specificity, mechanisms 7368.
 lipids biosynthesis, energetics 7487.
 media (culture), wort 2714.
 media (isolation), Antarctica 3626.
 media (isolation), brewing 4528.
 media (isolation), soil 6348.
 microflora, apples fruit juices 9279.
 microflora, cheese 7585.
 mitochondria, adenosinetriphosphatase stabilization proteins, amino acid sequence 8274.
 mitochondria, proteolipids, purification, characterization 913.
 mitochondria, rRNA 21S genes, erythromycin resistance 1526.
 morphology, kefir 5609.
 mutants, insertion, nucleotides, methodology 1808.
 mycelial dimorphism, assays methodology 9082.
 new records, chemical properties, mutations, effects on wine, coloration 7511.
 nucleoproteins, separation techniques, RNA, proteins 9119.
 oxygen tension effects on ethanol fermentation 143.
 pathogens, antifungal activity, bifonazole, clotrimazole 7938.
 pentoses conversion, ethanol production 9236.
 pentoses fermentation, ethanol production 4728.
 phenylacetylcarbinol production 1974.
 6-phosphoinase, AMP affinity, fructose-2,6-diphosphate stimulation 2782.
 6-phosphofructokinase, purification, characterization 6432.
 phosphoglycerate kinase, amino acid sequence 6458.
 phosphoglycerate kinase, purification, characterization 6446.
 phosphoglycerate kinase, purification, characterization 6447.
 phosphoglycerate kinase, structure, ATP, 3-phosphoglyceric acid binding effects on, X-ray scattering 7356.
 phyllosphere distribution, growth stage, *Vicia faba*, *Glycine max*, effects on 6946.
 processing, baking, storage, physicochemical properties 5621.
 production, ethanol, *Saccharum officinale*, bagasse 5571.
 production, Schwannomyces castellii 2043.
 protons release, detection, spectrophotometry 2710.
 psychrotrophic microorganisms, analysis, milk products 6665.
 pure culture, hybridization selection, wine fermentation, sulfur dioxide tolerance 147.
 pyridoxaminephosphate oxidase, amines activation, mechanisms 6553.
 ribonuclease, immobilized enzymes 1907.
 RNA degradation, ozone 1592.
 RNA, isolation, ion-exchange chromatography 5480.
 seasonal variation, rot, *Opuntia stricta*, food sources, *Drosophila* 3048.

Yeasts, (continued)

sensitivity, sorbic acid, benzoic acid, potassium sorbate, sodium benzoate 7093.
 separation techniques, fermentation media 9983.
 separation techniques, fermentation media 9984.
 single-cell protein, calcium, phosphorus, supplementation, feeding trials, chickens 9285.
 single-cell protein, cell walls lysin, *Streptomyces lytic* enzymes 7583.
 single-cell protein, nutrient sources, dogs 3851.
 single-cell protein production 7602.
 single-cell protein, production, media (culture), *Helianthus tuberosus*, extracts 7606.
 soil, Antarctica 1475.
 soil isolates, carbon sources, nitrogen sources, metabolism 5897.
 soil microorganisms, cytology 581.
 species composition, atmosphere composition effects on, blood culture 9012.
 spoilage, meat, organoleptic properties 2038.
 spoilage, meat products, storage effects on taste panel evaluation 4771.
 spoilage, milk products, polyethylene packaging, oxygen permeability 4884.
 starch, fermentation control 8412.
 stimulants, *Streptomyces levoris*, effects on biosynthesis, biotin, levorin, coenzyme A 8021.
 strains, selection, ethanol, production, fermentation, starch 3756.
 subunit cytochrome activity 6059.
 sugars production, biomass hydrolysis, enzymatic activity 5535.
 sulfur dioxide effects on fermentation 1036.
 thermophilic microorganisms, α -amylase biosynthesis 1913.
 use, carcinogenicity testing, methodology 4465.
 volume, association, sediments, suspensions, measuring techniques 9089.
 wild type, media (isolation), brewing 4527.
 yeasts 7567.
Yellow fever virus,
 isolation, identification, cell culture, *Aedes aegypti* 9835.
Yellow mosaic virus,
 disease resistance, *Vigna radiata* 5806.
Yellow spot,
Penicillium tritici-repentis, epidemiology, yield, *Triticum aestivum* 8547.
Triticum, effects on yield 4956.
Yellowing,
 mycoplasma-like organisms, roots symptoms, *Cocos nucifera*, Jamaica 2228.
Yellows,
Cocos nucifera, association *Spiroplasma* pathogenicity 3968.
 etiology, raspberry bushy dwarf virus, *Rubus*, disease resistance 464.
Fusarium oxysporum f.sp. *api*, *Apium graveolens* var. *duice*, factors affecting 5748.
 Lycopersicon esculentum, effects on, yield, food quality 1311.
 mycoplasma-like organisms, antigens, detection, enzyme-linked immunosorbent assay, immunoelectron microscopy, *Callistephus chinensis* 8597.
 mycoplasma-like organisms, *Cocos nucifera*, new records, Mexico 7678.
 mycoplasma-like organisms, disease transmission, vectors, *Deftocephalus* flavicosta, *Cocos* 1210.
 mycoplasma-like organisms, effects on stomata, *Ulmus* 3171.
 mycoplasma-like organisms, isolation, sap, *Cocos nucifera* 1205.
 mycoplasma-like organisms, isolation, *Vitis vinifera* 5024.
 mycoplasma-like organisms, oxytetracycline, disease control, *Cocos nucifera* 1206.
 mycoplasma-like organisms, sap, chemical composition, *Cocos nucifera* 1226.
 mycoplasma-like organisms, vectors, *Cicadellidae* 9398.
Yersinia,
 antibacterial activity, temocillin 5254.
 cross-reactivity *Brucella*, enzyme-linked immunosorbent assay, brucellosis diagnosis, man 8143.
Yersinia enterocolitica,
 antibacterial activity, bicyclomycin 2595.
 antibiotic sensitivity testing, aminoglycoside antibiotics, β -lactam antibiotics 6089.
 antibiotic sensitivity testing, antibiotic resistance, streptomycin, sulfamethoxazole 2524.
 bile salts effects on recovery 672.
 detection, enumeration, DNA hybridization methodology, food contamination 9049.
 enteritis, clinical isolates incidence, antibiotic resistance, man 8733.
 enterotoxins, detection, assays, factors affecting 9307.
 enterotoxins production, milk 1111.
 enterotoxins production stability, methanol solubility 7633.
 enterotoxins, purification, characterization, conferences 9298.
 enumeration, meat products 1083.
 food contamination, packaging, beef 224.
 gastrointestinal tract clinical isolates, norfloxacin antibacterial activity 2455.
 identification, pathogenicity, food isolates 2048.
 incubation temperature effects on endotoxins biosynthesis 2950.
 isolation, drinking water, sewage sludge 8945.
 media (culture), identification 3604.
 media (enrichment) 3576.
 media (enrichment) 3606.
 media (enrichment), isolation, poultry 3566.
 media (isolation), meat 2049.
 media resistance, mercuric reductase, characterization 8727.
 microbial pollution, surface water, sediments 2627.
 pathogenicity, food contamination 174.
 pH, tolerance, relationship, nutrient enrichment, isolation, methodology 8475.
 survival, growth, pH effects on, yogurt 1180.
Yersinia frederiksenii,
Yersinia kristensenii, identification, pathogenicity, food isolates 2048.
Yersinia intermedia,
 identification, pathogenicity, food isolates 2048.
Yersinia kristensenii,
 identification, pathogenicity, food, isolates 2048.
Yersinia pestis,
 antibiotic sensitivity testing 6110.
 3'-5'-cyclic-nucleotide phosphodiesterase, purification, characterization 971.
 media (isolation), polymyxin-erythromycin 1787.
 mutants, polymyxin, antibiotic sensitivity testing 6174.
 pestin production, synthetic media 1680.
Yersinia pseudotuberculosis,
 antibiotic sensitivity testing 2524.
 lipopolysaccharides, polysaccharides side chains structure 6568.
 polysaccharides, structure 9199.

- Yersinia ruckeri**, animal isolates, oxolinic acid antibacterial activity, in vitro 8766.
bacterins, vaccines preparation, immunogenicity, *Salmo gairdneri* 8925.
- Yield**,
Cacao, swollen shoot virus infection 391.
Carthamus trichos, *Alternaria carthami* infection effects on 1250.
cheese, production, psychrotrophic bacteria effects on 4788.
ethanol, fermentation, evaporation 8399.
Fragaria, rot, *Phytophthora cactorum*, effects on 5755.
Fusarium oxysporum f.sp. cepae, *Pyrenochaeta terrestris*, effects on, *Allium cepa*, experimental infection 2191.
Glycine max, anthracnose, *Colletotrichum truncatum*, effects on 1137.
Glycine max, brown spot, *Septoria glycines*, effects on 5678.
Glycine max, *Rhizobium japonicum* effects on, Canada 7861.
Glycine max, *Rhizobium japonicum* nitrogen fixation effects on 7000.
Gramineae, *Fusarium* infection effects on 7675.
Lycopersicon esculentum, canker, pathogenesis, *Corynebacterium michiganense* subsp. *michiganense* 8579.
Lycopersicon esculentum, tobacco mosaic virus infection 2167.
Lycopersicon esculentum, yellows effects on 1311.
Manihot esculenta, leaves infection, cassava common mosaic virus 407.
Manihot esculenta, reduction, cassava mosaic virus 1314.
maize virus, cell culture, factors affecting 1744.
Medicago sativa, reduction, alfalfa mosaic virus infection 2102.
mulches effects on, *Verticillium wilt*, *Solanum melongena* 476.
Orzyza sativa, sheath blight, height effects on 3017.
pecans, *Carya illinoensis*, effects on *Aspergillus parasiticus* aflatoxins accumulation 3871.
plants, *Zootylophora chroococcum* inoculation seeds effects on 7800.
ratoon stunt, bacterial, effects on, *Saccharum officinale* 2139.
reduction, *Triticum*, leaves necrosis, *Septoria tritici* infection 9368.
root rot fungi infection *Trifolium* effects on 2104.
Saccharum, comparison, smut grades 6859.
Solanum tuberosum, blight, *Phytophthora infestans*, effects on 6822.
Solanum tuberosum, ring rot+potato virus S, potato virus X, infection, effects on 1230.
Trifolium repens, +endomycorrhizas 2330.
Trifolium repens, nitrogen fixation, nitrogen fertilizers effects on 2364.
Triticum aestivum, fungi root rot, factors effecting 1179.
Triticum aestivum hormones mutants, relationship, *Azoospirillum* inoculation 5944.
Triticum aestivum, relationship, *Azoospirillum* inoculation 5942.
Triticum aestivum, *Septoria* infection 9369.
Triticum aestivum, stripe rust, *Puccinia striiformis* 1165.
Triticum, *Gaeumannomyces graminis* take-all, potassium nutrition, effects on 371.
Triticum, soils (loam), fertilizers (slow release) effects on 621.
Triticum, yellow spot effects on 4956.
tropical environment, soil microorganisms, effects on, plants, books 8181.
turnip mosaic virus, arabis mosaic virus, effects on, *Rheum raphanostemum* 2198.
Vicia faba, *Rhizobium leguminosarum* effects on 6382.
Vigna unguiculata, cowpea mosaic virus infection effects on 337.
Zea mays, *Fusarium* moniliforme, seed-borne diseases, effects on 1180.
Zea mays, relationship, *Azoospirillum* inoculation 5943.
Zea mays, *Sorghum bicolor*, rhizosphere, nitrogen fixation, *Azoospirillum* brasiliense, *Azotobacter chroococcum* 1500.
- 3-Vitlene-2,4-pentanedione**, derivatives, antiviral activity, structure-activity relationships 5208.
- Yoghurt**,
fermentation, *Lactobacillus bulgaricus* + *Streptococcus thermophilus*, mixed culture, effects on sugars 3829.
starter cultures, relationship, milk, *Streptococcus thermophilus*, *Lactobacillus bulgaricus* 3848.
- Yogurt**,
gas production, fungi identification 4840.
production, bacteria fermentation effects on proteins 4805.
production, sheep, milk, antibiotics excretion effects on 4871.
production, skim milk, lactose hydrolysis, use β -D-galactosidase, fungi 7569.
Salmonella typhimurium, lactic acid effects on growth 4811.
starter cultures, antimicrobial activity, vitamins, -D-galactosidase activity 7591.
Streptococcus thermophilus, growth stimulation factors 7600.
whey proteins effects on, *Streptococcus thermophilus*, *Lactobacillus helveticus* 4813.
Yersinia enterocolitica, survival, growth, pH effects on 1080.
- Yugoslavia**,
rivers contamination, *Escherichia coli*, coliforms, phages 2620.
- Zaire**,
Nocardia like Mycobacterium isolation, soil 3193.
- Zea**,
susceptibility, viruses 4947.
- Zea diploperennia**,
susceptibility, downy mildew, *Peronosclerospora sorghi* 5700.
- Zea mays**,
aflatoxin B1 contamination, drought, *Spodoptera frugiperda* pest outbreaks, effects on 4887.
aflatoxins levels, disease resistance 5653.
Aspergillus parasiticus aflatoxins inhibition, insecticides role 8557.
breeding effects on aflatoxins contamination 3880.
Callose formation, response, *Phytophthora cinnamomi* infection 3020.
chocolate spot, *Pseudomonas syringae* pv. *coronafaciens* 1199.
Cochliobolus carbonum infection, disease resistance inheritance 455.
Cochliobolus carbonum infection, virulence 375.
Cochliobolus carbonum inoculation, host-pathogen interactions 382.
Colletotrichum graminicola anthracnose, *Orthoptera* role 369.
crop production (no-tillage), association soil nitrogen balance 6986.
crop residues, cell walls, biodegradation, *Chaetomium cellulolyticum*, protein biosynthesis 8418.
crop residues, *Colletotrichum graminicola*, survival 3946.
crop residues, pretreatment, heat+sodium hydroxide, hydrolysis, cellulase, *Trichoderma viride* 8448.
crop residues, survival, *Cercospora zeae-maydis*, etiology 4051.
crop rotation, *Vigna unguiculata*, *Phaseolus vulgaris*, nodulation, growth 1504.
cryoinjury, *Erwinia herbicola*, biological control, bacteria, ice, nuclei, activation 8643.
- Zea mays, (continued)**
cryoinjury, *Erwinia herbicola*, inhibition, *Pseudomonas syringae*, ice nuclei activation, biological control 8642.
decline, etiology, rhizosphere microorganisms, phytotoxins, pesticides 367.
detection, aflatoxins, *Aspergillus flavus*, *Aspergillus parasiticus*, characterization 8509.
disease resistance, *Diplodia maydis*, stalk rot, *Ostrinia nubilalis* infestation effects on 361.
disease resistance, *Helminthosporium maydis*, mitochondria proteins electrophoresis 8616.
disease resistance, infection, *Bipolaris maydis*, *Colletotrichum graminicola*, comparison 4069.
disease resistance, maize dwarf mosaic virus infection, inheritance 6841.
downy mildew, *Peronosclerospora*, *Sclerospora graminicola*, epidemiology, reviews 1186.
downy mildew resistance, *Peronosclerospora sorghi*, germplasm, population genetics 8626.
downy mildew, *Sclerospora sorghi* infection, Somalia 381.
downy mildew, *Sclerospora sorghi*, population ecology, limiting factors 5698.
Erwinia chrysanthemi pathogenicity, biotyping 4927.
Exserohilum turcicum leaf blight, factors affecting 5717.
factors affecting leaf blight epidemiology 6772.
fertilizers, stimulation incidence, smut *Ustilago maydis* 9324.
fungi infection, plant protection, coatings, waxes, plastics 4071.
fungi infection, propionic acid effects on growth 6746.
Fusarium solani association, deoxyvinylol detection, gas chromatography 7615.
genotypes, relationship, virulence, *Gibberella zeae*, ear rot 3945.
germplasm, leaf blight incidence 2131.
Gibberella zeae pathogenicity, biological properties 1167.
Glomus mosseae symbiosis, nitrate soil amendment, foliar applications, effects on 4204.
growth, yield, relationship, *Azospirillum* inoculation 5943.
Helminthosporium maydis pathogenicity, genetic analysis 3005.
Ht gene, disease resistance, virulence, leaf blight, *Exserohilum turcicum* 1370.
HTN gene, disease resistance, leaf blight, *Exserohilum turcicum* 5710.
leaf blight, *Drechslera maydis*, *Cochliobolus heterostrophus*, Tanzania 7673.
leaf blight, *Drechslera turcica*, medicinal plants extracts antifungal activity 7756.
leaf blight, *Exserohilum turcicum*, pathogenesis, USA, Ohio 7668.
leaf blight, *Exserohilum turcicum*, races virulence, USA 9363.
leafspot, *Cercospora zeae-maydis*, pathology 9337.
leafspot, *Cercospora zeae-maydis*, relative humidity, dew, effects on, pathogenesis 2135.
leafspot, pathogenesis, *Cercospora zeae-maydis*, sporulation 3957.
leaves, application, *Colletotrichum graminicola*, *Helminthosporium maydis*, spores, methodology, humidity 9081.
maize chlorotic dwarf virus stunt, *Garniella nigrifrons* vectors, sex differences 5697.
maize chlorotic mottle virus infection, disease control 1191.
maize chlorotic mottle virus, seed-borne diseases 4949.
maize dwarf mosaic virus, disease control, oil, vectors, *Rhopalosiphum maidis*, *Schizaphis graminum* 6843.
maize dwarf mosaic virus infection, disease resistance, Hungary 7745.
maize dwarf mosaic virus infection, effects on susceptibility, *Helminthosporium maydis* infection 368.
maize mosaic virus infection 2119.
maize rayado fino disease virus isolates, purification, biological properties 364.
maize rough dwarf virus infection, symptoms 8561.
maize streak virus infection, disease control methodology 461.
maize white line mosaic virus mosaic disease asymptomatic infection, incidence 4969.
mixed infection, interaction maize dwarf mosaic virus *Helminthosporium maydis* 3007.
mycorrhizas, competition, interspecific relationships, *Glomus* 5894.
nitrogen fixation, *Azotobacter chroococcum*, seeds inoculation 4233.
nitrogen fixation, roots, stems 8699.
nitrogen nutrition, role, *Azospirillum* brasiliense biomass 7011.
nitrogen sources, *Azotobacter chroococcum* inoculation soil, nitrogen fixation 4232.
occurrence, aflatoxins, *Aspergillus flavus*, USA, Louisiana 7626.
pathogenicity, *Stenocarpella macrospora*, comparison, *Stenocarpella maydis*, USA 6780.
Peronosclerospora sorghi infection, pathogenesis association disease resistance 4085.
Peronosclerospora sorghi oospores formation, India 3018.
Physopella zeae infection pathogenesis, morphology 2130.
Physopella zeae pathogenesis, morphogenesis 383.
plant breeding, disease resistance, *Kabatella zeae* eyespot 9456.
plant breeding, disease resistance, maize dwarf mosaic virus 8604.
plant breeding, disease resistance, wilt, *Erwinia stewartii* 1346.
plant breeding, maize dwarf mosaic virus disease resistance genes, levels, genetic analysis 4092.
pollen, enhancement, *Colletotrichum lindemuthianum* infection, inhibition, cowpea mosaic virus infection, *Vigna unguiculata* 327.
Pseudomonas syringae pv. *syringae*, syringomycin, syringotoxin, effects on, mitochondria 2986.
Puccinia polysora rust, incidence, relationship, weather, USA, Indiana 6765.
rhabdovirus infection 2118.
rhizosphere, *Azotobacter chroococcum* growth 3195.
rhizosphere microorganisms effects on minerals uptake 4190.
roots, cells, use, *Helminthosporium maydis*, phytotoxins, bioassays 8552.
rots, inoculum, *Pseudomonas*, association, *Rhizobium*, methodology 3548.
roots, nutrient uptake, role, *Azospirillum* brasiliense 6988.
rots, plant diseases, *Rhizoctonia zeae*, *Rhizoctonia solani*, interaction, herbicides 5706.
rust, pathogenesis 1168.
seedlings, disease resistance, blight, ear rot 1361.
seedlings, etiolation, host-parasite interactions, susceptibility, *Helminthosporium maydis*, *Helminthosporium carbonum* 3015.
seedlings, *Peronosclerospora sorghi*, oospores, infection, inoculum, methodology 8551.
seeds germination, *Azotobacter chroococcum* stimulation 3194.
soil fauna association, bacteria, fungi 6941.
+Sorghum crop rotation, effects on maize chlorotic mottle virus infection 2116.
Sorghum halepense, maize dwarf mosaic virus transmission 4971.

Subject Index

Zae mayas, (continued)

spiropasma stunt, enzyme-linked immunosorbent assay detection 3011.
stalk rot, *Erwinia chrysanthemi*, symptoms, pathogenicity 2140.
stalk rot, fertilizer applications effects on 1197.
stalk rot, *Fusarium moniliforme*, predisposing factors 6754.
stalk rot, *Gibberella zeae*, *Fusarium graminearum*, relationship *Ostrinia nubilalis*, pests infestation 9349.
stalk rot, top rot, Brazil, *Erwinia chrysanthemi* pv. *zeae* 2141.
susceptibility, *Helminthosporium maydis* infection, maize dwarf mosaic virus infection effects on 1185.
symbiosis, nitrogen-fixing bacteria, screening 7008.
symptoms, downy mildew, *Peronosclerospora sorghi* 2122.
tile, disease control, brown spot, *Physoderma maydis* 7736.
urea foliar applications, effects on rhizosphere microorganisms 5932.
viruses infection, transmission, symptoms, control 5723.
water stress effects on *Aspergillus flavus* infection 5664.
yield, *Azospirillum* inoculation, straw soil amendment, nitrogen fixation, rhizosphere 9598.
yield, *Fusarium moniliforme*, seed-borne diseases, effects on 1180.
yield reduction, eye spot, *Kabatella zeae* 4964.
yield, rhizosphere, nitrogen fixation, *Azospirillum brasilense*, *Azotobacter chroococcum* 1500.

Zearalenone,

binding dehydrogenase active sites, *Saccharomyces cerevisiae* 7625.
biosynthesis, *Fusarium culmorum*, relationship *Gramineae* pathogenesis 8510.
biosynthesis, *Fusarium graminearum*, grains substrates 8511.
contamination, assays, corn, feeds 5644.
grain dust, grain elevators 7619.
production, *Fusarium*, characterization 2073.
radioimmunoassay 2066.

Zelkova serrata,

Ceratocystis ulmi, pathogenicity 5871.

Zeeilte,

effects on *Cephalosporium caerulens* cerulenin biosynthesis 1646.

Zepharentes rosea,

Pseudocercospora indica sp. nov. isolation, new records, India 3989.

Zinc,

-acid rain, pollution effects, viability, soil microorganisms 9509.
bacteria uptake, wastewater treatment 5313.
binding alcohol dehydrogenase, polarography, yeasts 6496.
content, proteinase, *Bacillus mesentericus* 5522.
content, rhizosphere microorganisms, rhizoplane microorganisms, soil, USSR 2334.
effects on ammonification, nitrification, nitrifying bacteria, soil pollution 4238.
effects on phosphate-dissolving bacteria inoculation, yield, *Vicia faba* 5892.
effects on, ticarcillin± tobramycin, antibacterial activity, *Pseudomonas aeruginosa* 754.
mouthwashes, retention, dental plaque inhibition, man 8998.
role methionyl-tRNA synthetase aminoacylation activity, *Escherichia coli* 953.

Zinc coccol,

Brassica campestris, effects on leaf surface fungal flora 3146.

Zineb,

effects on *Macrophomina phaseolina* spore germination 7760.
effects on seeds microflora, *Capsicum annuum* 5832.
foliar applications, effects on rhizosphere microorganisms, *Cicer arietinum* 4254.

Zinnia angustifolia,

× *Zinnia elegans*, interspecific hybridization, plant breeding, disease resistance, powdery mildew 7729.

Zinnia elegans,

× *Zinnia angustifolia*, interspecific hybridization, plant breeding, disease resistance, powdery mildew 7729.

Zinniel,

Alternaria tagetica, production, *Tagetes erecta* phytotoxicity 9392.

Zizania aquatica,

bacteria leaf blight, etiology 5702.
brown spot, *Drechslera oryzae*, *Drechslera sorokiniana*, fungicides, treatment 2272.

eye spot, etiology, *Drechslera gigantea* 1170.

Pseudomonas syringae pv. *syringae* brown spot, *Zizania aquatica* 9350.

Zizania latifolia,

smut, *Ustilago esculenta* 373.

Zizyphus mauritania,

pathology, leafspot, *Cristulariella moricola* 8596.

Zizyphus rotundifolia,

leaves, infection, *Passalora* 7790.

Zonocerus variegatus,

vectors, spores, *Botryodiplodia theobroma*, yams, post-harvest decay 442.

Zoogloae,

mutualism, *Cytophaga*, activated sludge 3463.

Zoogloae ramigera,

acetoacetyl-CoA synthetase, purification, characterization 57.

Zoonoses,

salmonellosis, cattle, abattoirs, surveys 234.

Zoophthora radicans,

biological control, conidia, spores, survival, environmental conditions, *Insecta* 1009.

pathogens, biological control, *Therioaphis trifolii* maculata 1033.

Zoospores,

Lagenidium giganteum, production, liquid culture 1816.

Lagenidium giganteum, production, media 8162.

Phytophthora megasperma f.sp. *glycinea*, pathogenesis, roots, *Glycine* max 4935.

Plasmiodiophora brassicae, role clubroot, *Brassica campestris* 4998.

Pythium, contamination, association, *Phytophthora megasperma* f.sp. *glycinea*, isolation methodology 589.

release, *Phytophthora cinnamomi*, soil pH effects on 3994.

Sclerospora graminicola, viability, infectivity, soil 6954.

soils (podzolic), effects on, *Phytophthora cinnamomi*, pathogenesis, dieback,

Banksia grandis 5850.

Zostera marina,

nitrogen fixation, rhizosphere sediments, sulfate-reducing bacteria 2356.

nitrogen fixation, roots, rhizomes 8698.

Zygomycetes,

clinical isolates, antifungal activity,

1-(4-chlorophenoxy)-3,3'-dimethyl-2-(1,2,4-triazol-1-yl)methyl-2-butanol 4301.

hydroxymethylglutaryl-CoA reductase (NADPH) inhibitor hydroxylation 8455.

life cycle, biological control, *Insecta* 1015.

Zygosporae,

Mortierella indohii, formation, observation methods 3627.

Zymolase,

purification, *Arthrobacter luteus* 935.

Zymomonas,

media (isolation), beer 1992.

Zymomonas mobilis,

alcohol dehydrogenase, iron(II) activation kinetics 7407.

alcohol dehydrogenase, pyruvate decarboxylase, purification, characterization,

association, ethanol production 6487.

bioreactors, ethanol production 6635.

cell culture, factors affecting, temperature, ethanol levels 9056.

continuous culture fermenters, use, ethanol production 9245.

ethanol biosynthesis, fermentation, proteins+phospholipids complex use 144.

ethanol fermentation, efficiency 2857.

ethanol fermentation, ethanol inhibition 7515.

ethanol production, fructose utilization 7514.

ethanol production, reviews 7507.

ethanol production, *Trichoderma*, wood cellulose hydrolysis 3750.

glucokinase, fructokinase, characterization, sugars metabolism 105.

glucokinase, fructokinase, purification, characterization 959.

glucose conversion, hydrocarbons production 4261.

immobilized cells, ethanol fermentation, by-products 6396.

immobilized cells, levan production, association, sucrose fermentation 9192.

isolation methodology, bagasse 6638.

levansucrase, purification, glucose, ethanol, inhibition activity 8270.

media (culture), ethanol production 3550.

media (isolation), auxotrophs 1788.

resins immobilized cells, use, bioreactors, ethanol production 9250.

+ *Saccharomycopsis fibuliger*, mixed culture, starches, conversion ethanol 7529.

starch fermentation, ethanol production 9233.

sucrose α-D-glucosylase production, characterization 9135.

sucrose, hydrolysis, glucose, effects on 6654.

ultrastructure relationship, ethanol, carbon dioxide production, glucose

utilization 5567.



cambridge scientific abstracts

ABSTRACTS JOURNALS ☐ ONLINE ☐ MAGNETIC TAPE

JOURNALS

Animal Behavior Abstracts

Aquatic Sciences & Fisheries Abstracts:

Part 1 - Biological sciences & living resources

Part 2 - Ocean technology, policy & non-living resources

Biochemistry Abstracts:

Part 1 - Biological Membranes

Part 2 - Nucleic Acids

Part 3 - Amino-acids, Peptides & Proteins

Calcified Tissue Abstracts

Chemoreception Abstracts

Computer & Information Systems Abstracts Journal

Conference Papers Index

Ecology Abstracts

Electronics & Communications Abstracts Journal

Entomology Abstracts

Genetics Abstracts

Immunology Abstracts

ISMEC (Information Service in Mechanical Engineering) Bulletins

Microbiology Abstracts

Part A - Industrial & Applied

Part B - Bacteriology

Part C - Algology, Mycology & Protozoology

Neurosciences Abstracts

Oceanic Abstracts

Pollution Abstracts

Safety Science Abstracts Journal

Science Research Abstracts Journal

Solid State Abstracts Journal

Toxicology Abstracts

Virology Abstracts

BACK VOLUMES

Back volumes are available for all CSA journals more than one year old, in either printed or microfiche form.

MAGNETIC TAPE

The CSA journals are available on magnetic tape in machine-readable form for current awareness and retrospective batch searching. Contact CSA Marketing Department for specifications and prices at 301-951-1403.

ONLINE

Some of the above journals are available on differing online information systems including:

- ☐ DIALOG® Information Retrieval Service
- ☐ Bibliographic Retrieval Service
- ☐ Information Retrieval Service (European Space Agency)
- ☐ System Development Corporation Search Service.

For further details contact CSA Database Services, toll free at 800-638-8076. In Maryland and outside continental U.S., call 301-951-1300.

Microbiology Abstracts